

Sustainability Appraisal of Dartford Local Plan

Sustainability Appraisal Report

Dartford Borough Council

Final report Prepared by LUC January 2021

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Chapter 1 Introduction

1.1 This Sustainability Appraisal Report has been prepared by LUC on behalf of Dartford Borough Council as part of the integrated Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the Dartford Local Plan Review.

1.2 This report relates to the Proposed Submission Local Plan and it should be read in conjunction with that document.

Context for the Dartford Local Plan

1.3 The statutory development plan for Dartford Borough is currently made up of the Core Strategy 2011 and the Development Policies Plan 2017. These are supported by the policies map and the various evidence bases that support the Core Strategy. In addition, the Kent Minerals and Waste Local Plan guide minerals and waste development across the County.

1.4 The Core Strategy is at the heart of the current development plan. It is a long-term plan to regenerate the Borough by outlining when, where, and how many, new homes and jobs will be created and what infrastructure will be required to support new development.

1.5 Several policy developments have taken place since the adoption of the Core Strategy, including:

The National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) were first published in 2012 - the NPPF has been subject to review and update and was re-published by the Ministry of Housing, Communities and Local Government (MHCLG) in July 2018 and then updated again in February 2019 and the PPG is constantly being updated. The NPPF and PPG require the preparation of clear, streamlined Local Plan documents as opposed to multiple development management documents.

The 2019 NPPF sets out a new standard approach for local authorities to follow when assessing housing need and preparing their 5-year housing supply requirements. The Government have recently published further proposed changes.

1.6 Consequently, the Council is in the process of preparing a new Local Plan that will guide the regeneration of the Borough into the 2030s.

1.7 The location of Dartford Borough is shown in Figure 1.1.

Sustainability Appraisal and Strategic Environmental Assessment

1.8 Sustainability Appraisal is a statutory requirement of the Planning and Compulsory Purchase Act 2004. It is designed to ensure that the plan preparation process maximises the contribution that a plan makes to sustainable development and minimises any potential adverse impacts. The SA process involves appraising the likely social, environmental and economic effects of the policies and proposals within a plan from the outset of its development.

1.9 Strategic Environmental Assessment (SEA) is also a statutory assessment process, required under the SEA Directive **[See reference 1]**, transposed in the UK by the SEA Regulations (Statutory Instrument 2004, No 1633, as amended by Statutory Instrument 2018 No 1232). The SEA Regulations require the formal assessment of plans and programmes which are likely to have significant effects on the environment and which set the framework for future consent of projects requiring Environmental Impact Assessment (EIA) **[See reference 2]**. The purpose of SEA, as defined in Article 1 of the SEA Directive is 'to provide for a high level of protection of the environment and to contribute to the

Chapter 1 Introduction

integration of environmental considerations into the preparation and adoption of plans.... with a view to promoting sustainable development'.

1.10 The UK left the EU in January 2020, with the transition period ending at the end of 2020. Following the end of the transition period, most EU law will continue to apply as a result of provisions in the European Union (Withdrawal) Act 2018 (EUWA) and the 'EU Exit' amendments to domestic legislation.

1.11 SEA and SA are separate processes but have similar aims and objectives. Simply put, SEA focuses on the likely environmental effects of a plan whilst SA includes a wider range of considerations, extending to social and economic impacts. National Planning Practice Guidance **[See reference 3]** shows how it is possible to satisfy both requirements by undertaking a joint SA/SEA process, and to present a SA Report that incorporates the requirements of the SEA Regulations. The SA/SEA of the Dartford Local Plan is being undertaken using this integrated approach and throughout this report the abbreviation 'SA' should therefore be taken to refer to 'SA incorporating the requirements of SEA'.



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Requirements of the SEA Regulations and Where These are Addressed in This SA Report

1.12 The list below signposts how the requirements of the SEA Regulations have been met in this report.

1.13 Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated (Regulation 12). The information to be given is (Schedule 2 of the SEA Regulations) set out below.

Reporting Requirements

- An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes – covered in Chapter 3 of this SA Report.
- The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme – covered in Chapter 3 of this SA Report.
- The environmental characteristics of areas likely to be significantly affected – covered in Chapter 3 of this SA Report.
- Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC – covered in Chapter 3 of this SA Report.

- The environmental protection, objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation – covered in Chapter 3 of this SA Report.
- The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects) – covered in Chapter 5 and Chapter 6 of this SA Report.
- The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme – covered in Chapter 6 of this SA Report.
- An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information Chapter 2 of this SA Report provides information about how the assessment was undertaken and difficulties encountered. Chapter 4 outlines why the Council selected the preferred approach in light of the alternatives for each set of options.
- A description of measures envisaged concerning monitoring in accordance with Regulation 17 – covered in Chapter 7 of this SA Report.
- A non-technical summary of the information provided under the above headings -- A separate non-technical summary document has been prepared to accompany the SA Report for the Proposed Submission Local Plan.

1.14 (Regulation 12(3)) requites that the report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which

certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment. These requirements are addressed throughout this SA Report.

Consultation Requirements

1.15 The SEA Regulations also set out the consultation processes that should be undertaken when preparing an environmental report.

- Authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Regulation 12(5)) – Consultation was undertaken on the SA Scoping Report from the 31st of October 2018 to the 5th of December 2018.
- Authorities with environmental responsibility and the public, shall be given an effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Regulation 13) – Consultation is being undertaken in relation to the Dartford Local Plan. The current consultation document is accompanied by this SA Report and the accompanying Non-Technical Summary (NTS).
- An EU Member State, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Regulation 14) – this does not apply to this SA Report.

Provision of Information on the Decision

1.16 Regulation 14 of the SEA Regulations addresses taking the environmental report and the results of the consultations into account in decision-making. When the plan or programme is adopted, the public and any countries consulted under Regulation 14 must be informed and the following made available to those so informed:

The plan or programme as adopted; a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report, the opinions expressed and the results of consultations entered into have been taken into account, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and Monitoring of the significant environmental effects of the plan's or programme's implementation (Regulation 17) -- To be addressed after the Local Plan is adopted.

1.17 Quality assurance: environmental reports should be of a sufficient standard to meet the requirements of the SEA Regulations. This report has been produced in line with current guidance and good practice for SEA/SA and this section demonstrates where the requirements of the SEA Regulations have been met.

Structure of This Report

1.18 This chapter has introduced the SA process for the Dartford Local Plan. The remainder of the report is structured into the following sections:

- Chapter 2: Methodology describes the approach that is being taken to the SA of the Local Plan.
- Chapter 3: Sustainability Context for Development in Dartford describes the relationship between the Dartford Local Plan and other relevant plans, policies and programmes; summarises the social, economic and environmental characteristics of the Borough and identifies the key sustainability issues.
- Chapter 4: Sustainability Appraisal Findings for Reasonable Alternatives summarises the findings of the policy and site options and preferred policy approaches assessed at the Preferred Options stage in 2019.
- Chapter 5: Sustainability Appraisal Findings for Dartford Local Plan summarises the SA findings for the Local Plan policies.

- Chapter 6: Cumulative Effects presents the total and cumulative effects of the Dartford Local Plan, when taken as a whole, and the potential in combination effects with other plans and projects.
- Chapter 7: Monitoring sets out the measures envisaged for monitoring effects of the Dartford Local Plan
- Chapter 8: Conclusions summarises the key findings from the SA and describes the next steps to be undertaken.

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

- Appendix A presents the consultation responses that were received in relation to the SA Scoping Report and the SA Report for the Dartford Local Plan Review Preferred Options Document, and explains how each one has been addressed.
- Appendix B presents the review of relevant plans, policies and programmes and updated baseline information.
- Appendix C presents the assessments for the options set out in the Dartford Local Plan Review Preferred Options Document (2019).
- Appendix D records the recommendations made in previous iterations of the SA and how these have been addressed by Dartford Borough Council.

Chapter 2 Methodology

Introduction

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

Local Plan Step 1: Evidence Gathering and Engagement

- Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope
 - Identifying other relevant policies, plans and programmes, and sustainability objectives
 - Collecting baseline information
 - Identifying sustainability issues and problems
 - Developing the SA Framework
 - Consulting on the scope of the SA

Local Plan Step 2: Production

Stage B: Developing and refining options and assessing effects

- Testing the Local Plan objectives against the SA Framework
- Developing the Local Plan options
- Evaluating the effects of the Local Plan
- Considering ways of mitigating adverse effects and maximising beneficial effects
- Proposing measures to monitor the significant effects of implementing the Local Plan
- Stage C: Preparing the Sustainability Appraisal Report
 - Preparing the SA Report
- Stage D: Seek representations on the Local Plan and the Sustainability Appraisal Report
 - Public participation on Local Plan and the SA Report
 - Appraising significant changes

Local Plan Step 3: Examination

Appraising significant changes resulting from representations

Local Plan Step 4 & 5: Adoption and Monitoring

- Making decisions and providing information
- Stage E: Monitoring the significant effects of implementing the Local Plan
 - Finalising aims and methods for monitoring
 - Responding to adverse effects

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

Stage A: Scoping

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

2.4 The Scoping stage of the SA involves understanding the social, economic and environmental baseline for the Plan area as well as the sustainability policy context and key sustainability issues. The Scoping Report presented the outputs of the following tasks:

- Policies, plans and programmes of relevance to the Local Plan were identified and the relationships between them were considered, enabling any potential synergies to be exploited and any potential inconsistencies and incompatibilities to be identified and addressed (see Appendix B).
- Baseline information was collected on environmental, social and economic issues in Dartford Borough Council. This baseline information provides the basis for predicting and monitoring the likely effects of options for policies and site allocations and helps to identify alternative ways of dealing with any adverse effects identified.
- Key sustainability issues for Dartford were identified and their likely evolution without the implementation of the Local Plan was considered (see Chapter 3).
- A Sustainability Appraisal framework was presented, setting out the SA objectives against which options and subsequently policies would be appraised. The SA Framework provides a way in which the sustainability impacts of implementing a plan can be described, analysed and compared. It comprises a series of sustainability objectives and associated sub-questions that can be used to 'interrogate' options and policies drafted during the plan-making process. These SA objectives define the long-term

aspirations of the district with regard to social, economic and environmental considerations. During the SA, the performances of the plan options (and later, policies) are assessed against these SA objectives and sub-questions (see SA Framework for the Dartford Local Plan below).

2.5 Public and stakeholder participation is an important part of the SA and wider plan-making processes. It helps to ensure that the SA Report is robust and has due regard for all appropriate information that will support the plan in making a contribution to sustainable development. The Scoping Report was published for consultation from 31st October 2018 until 5th December 2018. An updated Scoping Report was published in January 2019, which responded to the comments received in this consultation.

2.6 Appendix A lists the comments that were received during the consultation on the SA Scoping Report and describes how each one was addressed. In light of the comments received, minor changes have been made to the baseline information, the key sustainability issues and SA Framework.

2.7 The review of plans, policies and programmes and the baseline information are summarised in Chapter 3. The full review of plans, policies and programmes and the baseline information is included in the SA Scoping Report (January 2019) and in Appendix B.

2.8 The SA Framework for the Dartford Local Plan is presented below. The SEA topics that are relevant to each SA objective are listed under each objective.

SA Framework for the Dartford Local Plan

SA 1: To ensure that everyone has the opportunity to live in a decent home

Does the Plan deliver the range of types, tenures and affordable homes the Borough needs over the Plan Period? Relevant SEA topics: Population, Human Health and Material Assets

SA 2: To ensure ready access to essential services and facilities for all residents

- Does the Plan provide sufficient local services and facilities to support new and growing communities (e.g. schools, employment training and lifetime learning facilities, health facilities, recreation areas and services in local centres)?
- Does the Plan provide housing within proximity to existing services and facilities that are accessible for all, if not to be provided on site?
- Does the plan impact on the quality and extent of existing recreational assets, including formal and informal paths?
- Relevant SEA topics: Population, Human Health and Material Assets

SA 3: To strengthen community cohesion

- Will the Plan help deliver cohesive neighbourhoods with high levels of pedestrian activity/ outdoor interaction, where people mix?
- Will the Plan facilitate the integration of new neighbourhoods with existing neighbourhoods?
- Does the Plan promote developments that benefit and are used by existing and new residents in the Borough, particularly for the Borough's most deprived areas?
- Will the Plan help to reduce levels of crime, anti-social behaviour and the fear of crime?
- Relevant SEA topics: Population and Human Health

SA 4: To improve the population's health and reduce inequalities

- Does the Plan promote health and wellbeing by maintaining, enhancing, connecting and creating multifunctional open spaces, green infrastructure, recreation and sports facilities?
- Does the Plan protect health and wellbeing by preventing, avoiding and mitigating adverse health effects associated with, noise, vibration, pollution/contamination, and odour?
- Does the Plan promote healthy lifestyles by encouraging and facilitating walking and cycling?
- Does the Plan safeguard human health and well-being by promoting climate change resilience through sustainable siting, design, landscaping and infrastructure?
- Relevant SEA topics: Population, Human Health and Climatic Factors

SA 5: Facilitate a sustainable and growing economy and a vital and viable town centre

- Does the Plan provide an adequate supply of land and infrastructure to meet the Borough's forecast employment needs with sufficient flexibility to respond to uncertainties and changing economic circumstances?
- Does the Plan support opportunities for the expansion and diversification of business and inward investment?
- Does the Plan maintain and enhance the economic vitality and vibrancy of the Borough's town centre?
- Does the Plan provide new and improved education facilities leading to a work ready population of school and college leavers?
- Relevant SEA topics: Population, Human Health and Material Assets

SA 6: To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion

- Does the Plan promote the delivery of integrated, compact communities made-up of a complementary mix of land uses?
- Does the Plan support the maintenance and expansion of public transport networks including areas with sufficient demand for the introduction of new public transport?
- Does the Plan facilitate new and enhanced walking and cycling links?
- Does the Plan help to address road congestion and its causes?
- Relevant SEA topics: Air, Climatic Factors, Population and Human Health

SA 7: To conserve the Borough's mineral resources

- Does the Plan ensure adequate consideration is given to balancing the need for development with safeguarding resources?
- Relevant SEA topics: Material Assets

SA 8: To conserve the Borough's soils

- Does the Plan prioritise the development brownfield land over greenfield land?
- Does the Plan take an appropriate approach to dealing with the potential health and economic risks potentially associated with despoiled land?
- Does the Plan avoid development on the Borough's best and most versatile agricultural land?
- Relevant SEA topics: Soil and Human Health

SA 9: To maintain and improve the quality of the Borough's waters

- Does the Plan minimise inappropriate development in source protection zones?
- Does the Plan ensure there is sufficient waste water treatment capacity to accommodate the new development?
- Relevant SEA topics: Water

SA 10: To reduce air pollution and ensure improvements in air quality

- Does the Plan avoid, minimise and mitigate the effects of poor air quality?
- Does the Plan contain measures which will help to reduce congestion, particularly involving HGVs?
- Will the Plan minimise increases in traffic in the Air Quality Management Areas?
- Relevant SEA topics: Air, Climatic Factors, and Human Health

SA 11: To avoid and mitigate flood risk

- Does the Plan minimise development in areas prone to Flood risk and areas prone to increasing Flood risk elsewhere, taking into account the impacts of climate change?
- Does the plan minimise Flood risk and promote the use of SuDS and other flood resilient design?
- Relevant SEA topics: Water, Soil, Climatic Factors and Human Health

SA 12: To minimise the Borough's contribution to climate change

- Does the Plan promote energy efficient design?
- Does the Plan encourage the provision of renewable energy infrastructure where possible?
- Does the Plan minimise greenhouse gas emissions from transport?
- Relevant SEA topics: Climatic Factors

SA 13: To conserve, connect and enhance the Borough's wildlife, habitats and species

- Does the Plan conserve and enhance designated and undesignated ecological assets within and outside the Borough, including identification of opportunities for improvements to the conservation, connection and enhancement of ecological assets and achievement of biodiversity net gain?
- Does the plan ensure ecological networks are not compromised, and future improvements in habitat connectivity are not prejudiced, taking into account the impact of climate change?
- Does the Plan ensure that the biodiversity value of brownfield sites is identified, protected and enhanced?
- Does the Plan provide and manage opportunities for people to come into contact with resilient wildlife places whilst encouraging respect for and raising awareness of the sensitivity of such locations?
- Does the Plan conserve priority habitats within and outside the Borough and identify opportunities to enhance and connect them?
- Relevant SEA topics: Biodiversity, Flora and Fauna, Landscape and Human Health

SA 14: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment

- Does the Plan conserve the Borough's designated and undesignated heritage assets, including their setting and their contribution to wider local character and distinctiveness?
- Does the Plan outline opportunities for improvements to the conservation, management and enhancement of the Borough's historic environment, particularly at risk heritage assets?
- Does the Plan promote access to, as well as enjoyment and understanding of, the local historic environment for the Borough's residents and visitors?
- Relevant SEA topics: Cultural Heritage and Human Health

SA 15: To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape

- Does the Plan protect the Borough's sensitive and special landscapes and townscapes?
- Does the Plan encourage development that will have a positive effect on the character of the Borough's neighbourhoods, countryside and settlements?
- Relevant SEA topics: Landscape and Cultural Heritage

2.9 The SA Framework is designed to strike a balance between providing sufficient detail to identify key effects, whilst keeping analysis at a strategic level. Many of the objectives are cross-cutting, as they relate to a number of SEA topics. In order to avoid repetition and to ensure assessments are effective

and useful in decision-making, each SA objective is considered individually. For example, SA objective 1 relates to provision of suitable homes, including affordable housing. Provision of housing is not a sustainability issue in its own right but is important in ensuring people have a suitable place to live, which in turn benefits the health and wellbeing of residents and their economic productivity, among other social and economic benefits. As such, these factors are not repeated in the assessment of other SA objectives.

SA Stage B: Developing and Refining Options and Assessing Effects

2.10 Developing options for a plan is an iterative process, usually involving a number of consultations with public and stakeholders. Consultation responses and the SA can help to identify where there may be other 'reasonable alternatives' to the options being considered for a plan.

2.11 Regulation 12 (2) of the SEA Regulations requires that:

"The (environmental or SA) report must identify, describe and evaluate the likely significant effects on the environment of—

(a) implementing the plan or programme; and

(b) reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme."

2.12 Any alternatives considered for the plan need to be 'reasonable'. This implies that alternatives that are not reasonable do not need to be subject to appraisal. Examples of unreasonable alternatives could include policy options that do not meet the objectives of the plan or national policy (e.g. the National

Planning Policy Framework) or site options that are unavailable or undeliverable.

2.13 The SA findings are not the only factors taken into account when determining a preferred option to take forward in a plan. Indeed, there will often be an equal or similar number of positive or negative effects identified for each option, such that it is not possible to 'rank' them based on sustainability performance in order to select a preferred option. Factors such as public opinion, deliverability and conformity with national policy will also be taken into account by plan-makers when selecting preferred options for their plan.

2.14 This section provides an overview of how the appraisal of options has been undertaken and how this has fed into the development of the Dartford Local Plan.

Preferred Options Consultation

2.15 The Preferred Options Consultation Document (Regulation 18 of the Local Plan Regulations) included the following elements, which were subject to SA:

- Proposed Vision and Strategic Objectives.
- Main Plan Options.
- Strategic Site Options.
- Preferred Policies Approach.

2.16 No alternatives were identified for the Proposed Vision and Strategic Objectives.

2.17 In identifying the 'Main Plan Options' for the Local Plan, the Council focused on the most critical planning policy matters, topics and potential development locations which will define the Borough in future, its environment and main areas of regeneration. The policy approach options were identified by considering how the preferred Main Plan Options could come forward.

2.18 In developing these options, the Council considered responses received in response to the Strategic Issues Consultation, which took place from June to July 2018. This consisted of a series of open-ended questions so that residents and stakeholders could voice their opinions on the direction that the new Local Plan should take.

2.19 The Strategic Site Options considered were all identified within the adopted Core Strategy (2011). A Call for Sites for the Strategic Housing Land Availability Assessment Residual (SHLAA) was carried out in May 2018, which provided an opportunity for developers to provide updated proposals. Dartford Borough Council continued to accept sites submitted up to December 2020, including responses made to the Local Plan Preferred Options Consultation in January/February 2020.

2.20 In many instances, the Preferred Policies are based on the work presented in the Main Options part of the Preferred Options Consultation Document. In some instances, the Preferred Policies component of the Consultation Document presented potential reasonable alternatives in the form of questions, which the SA has also appraised for completeness.

2.21 The Council had already carried out some evidence based work in advance of the Preferred Policy approaches being selected. This included the Strategic Housing Land Availability Assessment, Employment Needs Review Paper and the Residential Needs Assessment. The national objectively assessed housing need figure was also known. On this basis, the Council was confident that it could meet its needs for housing and employment development within the existing urban area. The Council wishes to continue the longstanding strategy of regenerating the northern urban part of the Borough as part of the Thames Gateway. Whilst sites have already been brought forward in other parts of the urban area, the main areas for continuing this are focussed around Ebbsfleet Garden City and central Dartford. The preferred policy approaches reflect these matters.

2.22 At this stage of the plan preparation process, the SA Report for the Dartford Local Plan Review Preferred Options Consultation Document

(Regulation 18 stage) was prepared. The SA made a series of recommendations for the Dartford Local Plan and Preferred Options Consultation Document. These are presented in Appendix D, along with the Council's response to these recommendations. Where the Preferred Options Consultation Document was updated in response to these recommendations, the SA Report was updated to reflect this.

2.23 The SA Report for the Dartford Local Plan Review Preferred Options Consultation Document (Regulation 18 stage) was subject to public consultation alongside the Preferred Options Consultation document between 10th January and 21st February 2020.

SA Stage C: Preparing the SA Report

2.24 This report is the SA Report for the Dartford Proposed Submission Local Plan, also known as Publication or Regulation 19 stage. This SA Report describes the process that has been undertaken to date in carrying out the SA of Dartford Local Plan. It summarises the findings of the appraisal options and sets out the findings of the appraisal of the Local Plan, highlighting any likely significant effects (both positive and negative, and taking into account the likely secondary, cumulative, synergistic, short, medium and long-term and permanent and temporary effects).

2.25 It also presents the recommendations arising from the SA of the draft Local Plan, and the Council's response to these recommendations.

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

2.26 Dartford Borough Council is inviting comments on the Local Plan and this SA Report. Comments received will be submitted to the Inspector, alongside the

Dartford Local Plan, this SA Report and the rest of the Local Plan evidence base.

2.27 Appendix A presents the consultation comments that were received in relation to the SA Scoping Report and the SA Report of the Preferred Options Consultation Document and explains how they have been addressed.

SA Stage E: Monitoring Implementation of the Local Plan

2.28 Recommendations for monitoring the significant social, environmental and economic effects of implementing the Local Plan are presented in Chapter 7.

Appraisal Methodology

2.29 The policies included in the Local Plan, and options considered at earlier stages of SA, were appraised against the SA objectives in the SA Framework (presented earlier in this section) with symbols and colours being attributed to each option to indicate its likely sustainability effects on each objective as follows:

Table 2.1: Key to symbols and colour coding used in the SA of Dartford's Local Plan

++	The option is likely to have a significant positive effect on the SA objective(s).
++/-	The option is likely to have a mixture of significant positive and minor negative effects on the SA objective(s).

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

2.30 Due to the high-level nature of options assessed at this stage, all potential effects identified are uncertain. Where this uncertainty is considered to be particularly significant, a question mark was added to the relevant score (e.g. +? or -?) and the score is colour coded as per the potential positive, negligible or negative score (e.g. green, yellow, orange, etc.).

2.31 The plan may affect certain objectives to different degrees, i.e. the magnitude of effects will differ. As the purpose of SA is to identify likely significant effects, the symbols and colours shown in Figure 2.1 only indicate whether an effect is positive or negative (and/or uncertain) and whether it is minor or significant. Differences in the magnitude of similar effects were discussed in the assessment text, where relevant.

2.32 The assessment of each element of the Local Plan has been carried out in isolation, i.e. without reference to the potential effects of other aspects of the Local Plan. This allows identification of effects arising from each part of the

Local Plan individually, which is important as these are subject to change. An assessment of the Local Plan as a whole, including mitigation, is presented in Chapter 6.

2.33 The likely effects of options need to be determined and their significance assessed, which inevitably requires a series of judgments to be made. This appraisal has attempted to differentiate between the most significant effects and other more minor effects through the use of the symbols shown above. The dividing line in making a decision about the significance of an effect is often quite small. Where either (++) or (--) has been used to distinguish significant effects from more minor effects (+ or -) this is because the effect of an option on the SA objective in question is considered to be of such magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that objective. However, scores are relative to the scale of proposals under consideration.

2.34 For allocations and area-specific policies, assessments considered the proximity of the allocation site to various services and facilities, including education, healthcare and public transport. Where assessments refer to 'walking distance', the suggested acceptable walking distances set out in Guidelines for Providing for Journeys on Foot by the Chartered Institution of Highways and Transportation [See reference 4] were used as a guide.

Difficulties Encountered and Limitations

2.35 It is a requirement of the SEA Regulations that consideration is given to any data limitations or other difficulties that are encountered during the SA process.

2.36 Because many effects of development are dependent on the exact location, layout and design of development, it may be possible to mitigate some of the effects highlighted in this SA. However, given the inherent uncertainties about these details at this strategic stage of planning and assessment, the SA focuses on identifying potential significant effects of the options and policies

considered, whilst making no assumptions about detailed design or mitigation matters (other than specified in the Plan itself).

2.37 The SA of the plan has been undertaken using publicly available evidence or data held by the Council, that is available on a consistent basis across the Borough. Recognised data gaps include:

- There could be undiscovered archaeological features at any location within Dartford. For the purposes of this SA, we have focused on assessing the likely effects of development on known heritage assets, but further archaeological work may be necessary prior to any development in order to avoid loss of archaeological resources.
- The rate at which emissions from private vehicles will change over the course of the plan period as a result of technological improvements cannot be predicted or realistically factored in to judgements about air quality.
- The capacity of relevant wastewater treatment works to accommodate new development is unknown.
- Much of the northern part of the Borough lies within an area at risk of flooding from the River Thames and the River Darent. The majority of the northern area benefits from flood defences. Negative effects with uncertainty have been recorded for SA objective 11 (Flood risk) in these areas to acknowledge they lie within flood risk zones 2 and/or 3, and because it is possible that the defences will need to be improved in future, particularly given the implications of climate change. It is noted that the TE2100 Plan [See reference 5] identifies the need for ongoing management of flood risk in this area.

Chapter 3 Sustainability Context for Development in Dartford

Introduction

3.1 In order to set the context for the preparation of the Local plan and the SA, it is important to have an understanding of the wider environmental, social and economic policy objectives set at an international, national and local level, and also the baseline trends and issues that characterise the Local Plan area.

Review of Plans, Policies and Programmes

3.2 Schedule 2 of the SEA Regulations requires:

(1) "an outline of the...relationship with other relevant plans or programmes"; and

(5) "the environmental protection objectives established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation"

3.3 The Dartford Local Plan is not prepared in isolation, being greatly influenced by other plans, policies and programmes and by broader sustainability

objectives. It is necessary to identify the relationships between the Dartford Local Plan and the relevant plans, policies and programmes so that any potential links can be built upon and any inconsistencies and constraints addressed.

3.4 The Dartford Local Plan also needs to be consistent with international and national guidance and strategic planning policies and should contribute to the goals of a wide range of other programmes and strategies, such as those relating to social policy, culture and the historic environment. It must also conform to environmental protection legislation and the sustainability objectives established at an international, national and regional level.

3.5 It should be noted that the policy context is inherently uncertain as the current framework outlined here is likely to change in response to a number of key factors:

- Brexit Following the United Kingdom's (UK) departure from the European Union (EU) on 31 January 2020, it entered a transition period which ended on 31 December 2020. After that date, directly applicable EU law no longer applies to the UK and the UK is free to repeal EU law that has been transposed into UK law. As set out in the Explanatory Memorandum accompanying the Brexit amendments, the purpose of the Brexit amendments to the SEA Regulations is to ensure that the law functions correctly after the UK has left the EU. No substantive changes are being made by this instrument to the way the SEA regime operates.
- Covid-19 The Covid-19 pandemic has led to far-reaching changes to society in the UK and around the world. Which of these changes will continue in the long term is unknown and will depend on a variety of factors, including the global rollout of vaccines. Potential implications for planning and development include: Government measures to re-start the economy via support for housebuilding and infrastructure development; changes to permitted development rights; increased remote working and reduced commuting and related congestion and air pollution; increased prioritisation of walking and cycling over public transport; and increasing pressure to ensure satisfactory living standards are set and enforced.

Planning for the Future White Paper – The August 2020 consultation sets out proposals for the reform of the planning system in England, covering plan-making, development management, development contributions, and other related policy proposals. Potential implications include reducing the period of a Local Plan period to 10 years; a move towards a zonal planning system with areas of England allocated as either Growth Areas; Renewal Areas or Protected Area; and the abolition of Community Infrastructure Levy (CIL) and Section 106 planning obligations.

3.6 During the Scoping stage of the SA, a review was undertaken of the policy objectives of other plans, policies and programmes that are relevant to the Local Plan. These have been checked to ensure they are up to date and a full review is included in Appendix B. An overview of key policies and programmes is set out below.

Key international plans, policies and programmes

3.7 The requirement for SEA at the international level, originates from Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive') and Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') requires Habitats Regulations Assessment (HRA) to be undertaken in relation to the emerging Local Plan. These processes should be undertaken iteratively and integrated into the production of the plan in order to ensure that any potential negative environmental effects (including on European-level nature conservation designations) are identified and can be mitigated.

3.8 There are a wide range of other EU Directives relating to issues such as Water quality, waste and air quality, most of which were transposed into UK law through national-level policy.

3.9 The UK left the EU in January 2020 and the transition period ended at the end of 2020. Following the end of the transition period, most EU law continues to apply as a result of provisions in the European Union (Withdrawal) Act 2018 (EUWA) and the 'EU Exit' amendments to domestic legislation, although the UK is no longer bound by judgements of the Court of Justice of the European Union.

3.10 The UK remains part of a number of international treaties, many of which relate to environmental protection. For example, the Ramsar convention requires conservation and sustainable use of wetlands.

Key national plans, policies and programmes

3.11 The most significant national policy context for the Local Plan is the National Planning Policy Framework (NPPF) which was originally published in 2012 and revised in 2018 and updated once again in 2019 [See reference 6]. The NPPF sets out information about the purposes of local plan-making, stating that:

"Succinct and up-to-date plans should provide a positive vision for the future of each area; a framework for addressing housing needs and other economic, social and environmental priorities; and a platform for local people to shape their surroundings."

3.12 The NPPF sets out information about the purposes of local plan-making, stating that plans should:

- Be prepared with the objective of contributing to the achievement of sustainable development.
- Be prepared positively, in a way that is aspirational but deliverable.
- Be shaped by early, proportionate and effective engagement between plan-makers and communities, local organisations, businesses, infrastructure providers and operators and statutory consultees.
- Contain policies that are clearly written and unambiguous, so it is evident how a decision maker should react to development proposals.
- Be accessible through the use of digital tools to assist public involvement and policy presentation.
- Serve a clear purpose, avoiding unnecessary duplication of policies that apply to a particular area (including policies in this Framework, where relevant).

3.13 The NPPF requires local planning authorities to set out the strategic priorities for the area in the Local Plan. This should include strategic policies to deliver:

- Housing (including affordable housing), employment, retail, leisure and other commercial development.
- Infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, Flood risk and coastal change management, and the provision of minerals and energy (including heat).
- Community facilities (such as health, education and cultural infrastructure).
- Conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.

3.14 The NPPF also promotes well-designed places and development, as well as protection and enhancing beneficial use of the Green Belt.

3.15 Non-strategic policies should be used by local planning authorities and communities to set out more detailed policies for specific areas, neighbourhoods or types of development, including qualitative aspects such as design of places, landscapes, and development.

3.16 The NPPF also states that:

"Local plans and spatial development strategies should be informed throughout their preparation by a sustainability appraisal that meets the relevant legal requirements. This should demonstrate how the plan has addressed relevant economic, social and environmental objectives (including opportunities for net gains). Significant adverse impacts on these objectives should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where significant adverse impacts are unavoidable, suitable mitigation measures should be proposed (or, where this is not possible, compensatory measures should be considered)."

Neighbourhood Plans

3.17 The Localism Act (2011) sought to move decision-making away from central government and towards local communities. Part of this included the introduction of Neighbourhood Planning.

3.18 Neighbourhood Plans must be consistent with the requirements of the NPPF and, once adopted, Neighbourhood Pans form part of the statutory development plan for the district or Borough within which they are located. The NPPF sets out information about the purposes of Neighbourhood Plan-making, stating that:

"Neighbourhood planning gives communities the power to develop a shared vision for their area."

3.19 The NPPF also states that Neighbourhood Plans "can shape, direct and help to deliver sustainable development", but they should not promote less development than set out in the strategic policies in a Local Plan covering the neighbourhood area. Within this context, Neighbourhood Plans typically include policies to deliver:

- Site allocations for small and medium-sized housing.
- The provision of infrastructure and community facilities at a local level.
- Establishing design principles.
- Conservation and enhancement of the natural and historic environment.

3.20 There is one designated neighbourhood area within Dartford Borough, Stone. Stone Parish Council submitted the Draft Submission Stone Neighbourhood Plan to Dartford Borough Council in autumn 2020.

Baseline Information

3.21 Baseline information provides the context for assessing the sustainability of proposals in the Dartford Local Plan and it provides the basis for identifying trends, predicting the likely effects of the plan and monitoring its outcomes. The requirements for baseline data vary widely, but it must be relevant to environmental, social and economic issues, be sensitive to change and should ideally relate to records which are sufficient to identify trends.

3.22 Schedule 2 of the SEA Regulations requires data to be gathered on biodiversity, population, human health, flora, fauna, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage and landscape. As an integrated SA and SEA is being carried out, baseline information relating to other sustainability topics has also been included; for example, information about housing, education, transport, energy, waste and economic growth. This information can be found in Appendix B.

Key Sustainability Issues

3.23 A set of key sustainability issues for Dartford was identified during the Scoping stage of the SA and was originally presented in the Scoping Report. These have been reviewed to ensure they are up to date in light of any updated baseline information.

3.24 Identification of the key sustainability issues and consideration of how these issues might develop over time if the Local Plan is not prepared, help meet the requirements of Schedule 2 of the SEA Regulations to provide information on:

"the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan" and "any existing environmental problems which are relevant to the plan."

3.25 The likely evolution of each key sustainability issue if the Local Plan were not to be adopted is set out below.

Key sustainability issues for Dartford and likely evolution without the new Local Plan

- Key issue: population growth and demographic change will place additional demand on key services and facilities such as health, education and social care. In particular, there are currently capacity issues with schools and GP services (SA Framework objective SA 2).
 - Likely evolution without the new Local Plan: Without the Local Plan it is likely that services and facilities will still be delivered. However, it is less likely that these will be in appropriate locations, or of sufficient quality and quantity to keep pace with demand arising from new residential

development. The Local Plan offers an opportunity to deliver these in a coherent, sustainable manner alongside development.

- Key issue: there is a need for affordable housing across Dartford. At present the average house prices in the Borough are higher than the national average (SA Framework objective SA 1).
 - Likely evolution without the new Local Plan: without the Local Plan it is likely that house prices will continue to rise across the Borough and levels of affordable housing will be low. The Local Plan offers the opportunity to facilitate and expedite the delivery of affordable housing.
- Key issue: there is a need to reduce the inequalities gap between those living in the most deprived areas of Dartford and those living in the least deprived areas of Dartford. The Borough contains deprivation 'hot spots' that are geographically close to some of the least deprived parts of the country (SA Framework objective SA 4).
 - Likely evolution without the new Local Plan: without the Local Plan it is possible that the gap between the most and least deprived areas in the Borough will remain or grow. The Local Plan presents the opportunity to address this through the planning of new and improved communities and infrastructure, particularly within the areas that are amongst the 20% most deprived in the country.
- Key issue: levels of obesity in the District exceed the national average (SA Framework objective SA 4).
 - Likely evolution without the new Local Plan: without the Local Plan levels of obesity in the Borough may continue to rise, although national campaigns may work to reduce this. The Local Plan could further contribute to tackling obesity through policies that encourage active travel and access to green space and healthy food, and other recreation opportunities.
- Key issue: there is a deficit of open spaces in some areas in the northern half of the Borough, and some of the southern areas are not within walking distance of a park. This could be limiting opportunities for recreation and for people to connect with nature. (SA Framework objective SA 4.)

- Likely evolution without the new Local Plan: without the Local Plan it is likely that the deficit in open spaces will remain. The Local Plan offers the opportunity to address this by ensuring that the accessibility and quality of open space is high and new local green spaces are planned alongside new development. These will help people to connect to nature and natural environment. The new Local Plan provides further opportunities for connecting people with nature, including creating and enhancing green links within and between towns and into the countryside.
- Key issue: as with the County as a whole, total crime in Dartford has risen and violent crime makes up the largest proportion of the increase (SA Framework objective SA 3).
 - Likely evolution without the new Local Plan: the Local Plan would provide a contribution, alongside other local and national measures, to locally reduce crime through policies which aim to make the local environment and streets safer, for example by 'designing out' crime.
- Key issue: although unemployment is low in Dartford, the Covid-19 pandemic has led to a rise in unemployment and a decrease in economic productivity. The Borough needs to ensure a future supply of jobs and continued investment to ensure identified employment development opportunities are taken forward and deprivation issues tackled (SA Framework objective SA 5).
 - Likely evolution without the new Local Plan: it is uncertain how the job market will change without the implementation of the Local Plan and some degree of change is inevitable. However, the Local Plan offers the opportunity to create and safeguard jobs through the allocation and promotion of employment generating uses and office and industrial spaces and promotion of the rural economy, as well as promoting access and opportunity for all.
- Key issue: the major traffic routes of the M25 and the A2 pass through Dartford. These experience high levels of congestion and delays and traffic accidents and issues can spread onto the local road network. Rail capacity is also currently stretched. Population growth has the potential to exacerbate these problems (SA Framework objective SA 6).

- Likely evolution without the new Local Plan: without the Local Plan it is anticipated that congestion, and the number of traffic accidents will continue to rise with the rising population. The Local Plan presents the opportunity to address this through providing clarity for infrastructure providers and policy that promotes alternative forms of transport and sustainable locations for development that minimise the need to travel by car on the local network and will complement measures taken by highways authorities to combat congestion on the strategic road network.
- Key issue: a high proportion of the Borough's residents drive to work. The uptake of more Sustainable travel options is limited (SA Framework objective SA 6).
 - Likely evolution without the new Local Plan: without the Local Plan, car dependency will continue to be high. The Local Plan provides an opportunity to prevent this rising further and minimise car use through the promotion of sustainable and active transport (based on sufficient population densities) and sustainable development locations.
- Key issue: there are four Air Quality Management Areas in Dartford District, which have been designated because these areas exceed the annual mean Air Quality Strategy objective for NO2 and PM10, caused primarily by road traffic emissions (SA Framework objective SA 10).
 - Likely evolution without the new Local Plan: how air quality will change in the absence of a Local Plan is unknown, given that the Borough accommodates a high volume of through traffic. Without the Local Plan, development may be located in less sustainable locations that increase reliance on car use, which is likely to increase air pollution. Recent national policies and the emergence of new technologies are likely to improve air pollution, for example, through cleaner fuels/energy sources. Nonetheless, the Local Plan provides an opportunity to contribute to improved air quality in the Borough through the sustainable siting of development and the promotion of alternative travel modes to the motorised vehicle, in line with national policy aspirations.

- Key issue: the Borough contains some of the County's best and most versatile agricultural land which, where possible, should not be lost or compromised by future growth (SA Framework objective SA 8).
 - Likely evolution without the new Local Plan: notwithstanding that the most versatile agriculture land lies within Green Belt that receives national protection outside of the Local Plan without the Local Plan this land may be lost or compromised. The Local Plan provides an opportunity to ensure these natural assets are not lost or compromised, by prioritising brownfield sites and lower quality agricultural land for development.
- Key issue: some water bodies in Dartford are failing to meet the Water Framework Directive objective of 'Good Status'. The issues may be exacerbated by population growth (SA Framework objective SA 9).
 - Likely evolution without the new Local Plan: without the Local Plan is it possible that un-planned development could be located in areas that will exacerbate existing Water quality issues, although existing safeguards, such as the EU Water Framework Directive, would provide some protection. The Local Plan will provide the opportunity to ensure that development is located and designed to take into account the sensitivity of the water environment and provide an opportunity to plan for adequate wastewater infrastructure.
- Key issue: Dartford contains a large number of biodiversity sites which could be impacted by climate change and / or harmed by inappropriate development (SA Framework objective SA 13).
 - Likely evolution without the new Local Plan: even without the Local Plan, some important habitats and biodiversity sites will continue to receive statutory protection. However, without the Local Plan it is possible that development could be sited inappropriately and adversely impact biodiversity sites, even if indirectly. The Local Plan will also present an opportunity to manage the sensitivities of the sites and biodiversity networks, for example by locating development away from the most sensitive locations, provide for new green infrastructure, and ensure that growth does not adversely affect their current condition but where possible contributes to their improvement.

- Key issue: Flood risk to Dartford is dominated by tidal flooding, with a breach of the costal defence structures posing the most risk. The expected magnitude and probability of significant fluvial, tidal ground and surface water flooding is increasing in the Borough due to climate change (SA Framework objective SA 11).
 - Likely evolution without the new Local Plan: the Local Plan is not expected to reduce the likelihood of tidal flooding or prevent a breach of coastal defence structures. However, it does present the opportunity, alongside national measures, to mitigate the effects of potential future flooding and locate development in sustainable locations that would not be significantly impacted by flooding and ensure it is designed to be flood resilient where appropriate.
- Key issue: the Borough has an obligation to contribute to the national carbon reduction targets through the generation of low carbon and renewable energy, including decentralised energy networks, and encouraging energy efficiency measures in new and existing buildings (SA Framework objective SA 12). The Local Plan does not have the ability to set renewable energy requirements in residential development.
 - Likely evolution without the new Local Plan: the Borough will continue to have an obligation to reduce carbon emissions with or without the Local Plan. The Local Plan provides a way to contribute to these targets being met, by promoting sustainable development, for example by reducing the need to travel, and through encouraging low-carbon design, promotion of renewable energy and sustainable transport.
- Key issue: there are many sites, features and areas of historical and cultural interest in the Borough, a number of which are at risk, and which could be adversely affected by poorly located or designed development (SA Framework objective SA 14).
 - Likely evolution without the new Local Plan: while a number of the heritage assets in the Borough, for example listed buildings and scheduled monuments, will be protected by statutory designations, without the Local Plan it is possible that these, and undesignated assets, will be adversely affected by inappropriate development. The Local Plan provides an opportunity to protect these assets (including

their setting) from inappropriate development, as well as enhancing the historic environment and improving accessibility and interpretation of distinctive features of local heritage.

- Key issue: the Borough contains a number of locally distinct landscape character areas that could be harmed by inappropriate development (SA Framework objective SA 15).
 - Likely evolution without the new Local Plan: the Borough does not contain any national landscape designations and so character areas would be left without protection in the absence of the Local Plan and could be harmed by inappropriate development. The Local Plan offers an opportunity to ensure that the variation in landscape character is taken into account in the design and siting of development and opportunities for the protection and enhancement of the landscape are maximised. Parts of the Borough are also within the setting of the North Downs AONB, and therefore the Local Plan can help to ensure that development does not compromise this protected landscape.

Chapter 4 Reasonable Alternatives

Introduction

4.1 This chapter of the SA Report summarises the findings of the SA of the Preferred Options Consultation Document. The policies appraised below are in the order in which they appear in the Preferred Options Consultation Document. More detailed appraisals of each option, including the SA 'scores' for each SA objective are included in Appendix C.

4.2 The policy approaches considered by the Council and a summary of the SA findings are included for each option and preferred policy approach below. For each option and policy approach, the conclusions of the SA and the Council's reasons for taking the preferred option forward given in the SA of the Preferred Options Consultation Document are included below.

4.3 The SA of the Preferred Options Consultation Document also included an assessment of the draft vision and objectives set out in that document. These have not been reproduced in this chapter, as the vision and objectives appraised in Chapter 5 of this document are similar to, and an evolution of, the vision and objectives presented in the Preferred Options Consultation Document.

4.4 It should be noted that an additional appraisal question regarding priority habitats has been added to SA objective 13 in response to consultation comments on the SA of the Preferred Options Consultation Document. Appraisals in Appendix C have been updated in line with this addition, where relevant. These updates have not resulted in any changes to the overall SA conclusions set out below.

Recommendations

4.5 Throughout the SA process there has been close engagement between LUC and the planning officers at Dartford Borough Council responsible for preparing the Local Plan. As part of this LUC reviewed an early version of the Consultation Document and made recommendations for improvement, some of which fed into the version of the Consultation Document that was subject to public consultation. In addition, the SA of the Preferred Options Consultation Document included recommendations for the plan and policies for when they were drawn up in more detail. A record of these recommendations and how the Council has addressed them is included in Appendix D.

Main Plan Options

4.6 Six Main Plan Options were assessed. Each option set out a matter where strategic decisions need to be made by the Council when carrying out the Local Plan Review. The Main Plan Options related to:

- Brownfield land.
- Dartford town centre.
- Ebbsfleet Central Area.
- Swanscombe Peninsula.
- Green space.
- Transport.

4.7 For each of the Main Plan Options the Preferred Options Consultation Document set out the preferred option and alternative options that were also considered by the Council in coming to a decision about which approach to pursue. Each of these options have been subject to SA.

Main Plan Option 1: To what extent should brownfield land in the Borough be used for new homes and jobs?

4.8 This Main Plan Option comprised four options:

- 1A: Brownfield land should be used to its greatest extent across both the urban and rural parts of the Borough.
- 1B: Brownfield land should be used to a full extent in locations very well served by public transport (preferred option).
- IC: Brownfield land not a strong priority, with non-Green Belt land encouraged for development (including some greenfield sites).
- 1D: Reject a brownfield land focus, in favour of new growth locations elsewhere in the Borough, including more dispersed development that may include locations within the Green Belt.

SA Conclusion

4.9 Option 1B performs best in sustainability terms as it has received the most significant positive effects. It is considered that focussing a large amount of development on brownfield land would have multiple benefits for the Borough, such as protection of the natural environment, including finite natural resources, biodiversity and landscape. As more urban areas of the Borough provide the largest supplies of brownfield land, a focus on brownfield development is likely to reduce the need for residents to travel longer distances by private vehicle. This could help to reduce any contribution new development makes in terms of air pollution and release of greenhouse gases. Positive effects are expected to be more pronounced where brownfield land is considered strategically to result in the allocation of those sites which are most accessible by public transport, as is set out in Option 1B.

Council reasons for taking forward the preferred option

4.10 Option 1B is preferred as it would ensure that development makes the best use of brownfield land in sustainable locations which are well served by public transport. This option would mean that infrastructure can be properly planned to meet the needs arising from new development. Options 1A and 1C could lead to development in locations which are not well served by public transport and are likely to have greater impacts on biodiversity, the historic environment and landscape. Option 1A would result in more unplanned windfall development and Option 1C would lead to more dispersed development away from existing services and facilities, both of which make the provision of supporting infrastructure more difficult to achieve.

Relevant Local Plan policy/policies

- S1: Borough Spatial Strategy.
- S4: Borough Development Levels.
- M1: Good design in Dartford.
- M9: Sustainable housing locations.

Main Plan Option 2: How to ensure Dartford is a thriving town centre?

- **4.11** This Main Plan Option comprised three options:
 - Option 2A: Support extensive radical change through promoting residential redevelopment in and around the town centre, (including at high densities), achieving a rapid expansion of residents in the town centre and new premises for businesses and shops.

- Option 2B: Encourage redevelopment of selected areas in and around the town centre; creating new spaces where this will achieve significant diversification over time of activities, and transformation of the attractiveness of Dartford town centre.
- Option 2C: New development proposals considered on a case-by-case basis, based on a looser vision which aims for gradual regeneration but with limited direction on where and how redevelopment should occur.

SA Conclusion

4.12 Of the options considered, Option 2B performs most favourably in that it would allow for the regeneration of the town centre in a more considered and strategic manner. This option also allows for an appropriate phasing of regeneration and in all is likely to help reduce the potential for significant adverse impacts occurring in relation to the capacity of services at this location as well as in relation to the historic environment and the established character of the area. By securing for regeneration of the town centre and surrounding areas, Option 2B is expected to help attract inward investment, maintain the viability of the town centre, as well as service provision and public transport links at these locations. It is expected that this option would also perform most favourably in terms of reducing the need for residents to travel longer distances by private vehicle, which is likely to have associated benefits in terms of air quality and greenhouse gas emissions.

Council reasons for taking forward the preferred option

4.13 Option 2B is the Council's preferred option. This would ensure that redevelopment of sites in Dartford Town Centre is focussed on those areas which would transform the town and provide more diversification of activities. This targeted approach would ensure that there is a greater likelihood of services and facilities being provided to support development compared to

Options 2A and 2C, and that flood risk issues and impacts on the historic environment are adequately addressed.

Relevant Local Plan policy/policies

- D1: Central Dartford Strategy.
- D2: Central Dartford Development Principles.
- D3: The mix of uses in Dartford Town Centre.
- D4: Westgate Allocation.
- D5: East of Lowfield Street Allocation.
- D6: Priory Centre Road Allocation.
- D7: Station Surrounds/River Darent.

Main Plan Option 3: What strategy is most likely to retain green space in the Borough and deliver improvements?

4.14 This Main Plan Option comprised three options:

- Option 3A: Change the network of greenspaces in local planning policy to clearly indicate where is and is not priority in the Borough's securing greenspace, and possible improvements.
- Option 3B: Maintain the existing strategy for a green Borough through requiring new development to provide sufficient new open space and generally retaining existing local greenspace designations but consolidate how policies are presented.
- Option 3C: Increasing the amount and extent of Borough Open Space to protect green Dartford further.

SA Conclusion

4.15 Of the options, Option 3C is expected to have the most significant positive effects and as such should be the preferred option. Option 3C performs best as it aims to set aside more land for open space.

Council reasons for taking forward the preferred option

4.16 The Council's preferred approach is Option 3B. This would ensure that existing open space is protected and new open space is provided as a result of new development. It would have positive impacts in terms of improving health, mitigating air pollution and adapting to climate change. Whilst Option 3C has additional beneficial impacts against the SA objectives, Borough Open Spaces were only recently designated and covered all known opportunities then. Broadening the areas designated will be challenging given the extensive existing coverage, and finding further land to include could lead to a diminution of the quality of land designation and may not always be very well justified. This could therefore place at risk the robustness of the policy and its effectiveness in protection open spaces as a whole. Option 3A would focus provision on the areas most in need but could lead to a deterioration in the level of provision as a whole and in quality and may not relate well to new development which provides the best opportunity for new open space provision.

Relevant Local Plan policy/policies

M14: Green and Blue Infrastructure and Open Space Provision.

Main Plan Option 4: What is the best future for the Ebbsfleet Central area?

4.17 This Main Plan Option comprised three options:

- Option 4A: High-density business district.
- Option 4B: High-density urban heart with a range of uses, including employment, residential, a key health/education or leisure/culture use.
- Option 4C: Residential-led development.

SA Conclusion

4.18 Option 4B is considered to be the best performing option as it focuses on compact, mixed development, including housing and employment as well as additional uses such as health, education and leisure. This should help to reduce the need to travel and promote Community cohesion, as residents and workers would be able to meet their daily needs within the site.

Council reasons for taking forward the preferred option

4.19 The preferred option is Option 4B. It provides a mixed use, city scale development taking advantage of its proximity to Ebbsfleet International Station, with significant positive benefits in terms of access to services and facilities. Option 4A has not been pursued as there is no evidence that this form of development is achievable or deliverable. A residential led approach (Option 4C) would fail to capitalise on the presence of the international station as a hub for high quality transport and jobs.

Relevant Local Plan policy/policies

- E1: Ebbsfleet Garden City Strategy.
- E2: Ebbsfleet Garden City Development Principles.
- E4: Ebbsfleet Central Allocation.

Main Plan Option 5: What is the best future for the Swanscombe Peninsula area?

4.20 This Main Plan Option comprised three options:

- Option 5A: Support the development of an internationally important entertainment resort.
- Option 5B: A strategy to encourage sensitively integrated, lower density, mixed uses and ecological improvements.
- Option 5C: Do not specify potential uses but include a criteria-based policy to provide a basis for dealing with proposals that may be put forward.

SA Conclusion

4.21 Option 5B is considered to be the best performing option as it aims to create a development with mixed uses and improved transport links, which would help to reduce the need to travel and promote use of sustainable transport. Option 5B also performs well in relation to environmental objectives, as development would focus on brownfield land and would promote ecological improvements, particularly through the estuarine ecological park, which would likely have benefits both for wildlife and human health and wellbeing.

Council reasons for taking forward the preferred option

4.22 Option 5B is preferred as this would ensure that development is only located on brownfield land and would retain existing jobs. It would also be sensitively integrated taking account of the character of the area and its biodiversity value. Option 5A has is not supported as there is significant uncertainty on whether the development would be implemented and there is potential for adverse environmental, social and infrastructure impacts, including transport impacts on the local highways network. Option 5C fails to positively plan for the area which lies within Ebbsfleet Garden City, leading to lost opportunities for regeneration, ecological and land remediation benefits.

Relevant Local Plan policy/policies

- E1: Ebbsfleet Garden City Strategy.
- E6: Land North of Swanscombe Area.

Main Plan Option 6: How can Dartford best plan ahead for a better transport network?

4.23 This Main Plan Option comprised three options:

- Option 6A: To base the Local Plan's transport and development strategy Borough heavily on plan to extend Crossrail (Elizabeth Line) services to the Borough, and workup long-term development proposals now in support of major new rail provision.
- Option 6B: To focus on a Local Plan taking forward current transport schemes (Fastrack/buses, key road junctions, and rail), expecting development to be in walkable locations, and in parallel continue to explore the best longer-term way to secure a major 'modal shift' in transport choice, particularly through investigating Crossrail (Elizabeth

Line) extension. We will minimise need to travel for journeys, through planning for trips that can be done by walking (or cycling); particularly to access schools, healthcare, shops and jobs.

Option 6C: To focus Local Plan strategy heavily on securing new development that will help fund new road junctions.

SA Conclusion

4.24 It is likely that providing development at appropriate densities at areas around public transport in the Borough, in line with Options 6A and 6B, would have benefits in terms of achieving modal shift, access to services and other sustainability benefits associated with a reduced need to travel in the Borough. This is likely to include limited increases in air pollution and greenhouse gas emissions as new development is provided, with more residents having good access to sustainable transport options. Providing a focus at the main rail improvements in the Borough, set out through Option 6A could have further benefits related to regeneration of the town centre and the local economy considering its route and the potential to encourage footfall towards Dartford town centre. However, a narrow focus such as this is unlikely to help benefit the wider communities in Dartford. It may also have particularly adverse impacts in terms of the historic environment considering the specific sensitivities of the town centre. Overall Option 6B performs slightly better than 6A, due to the large amount of uncertainty associated with the provision of a new rail link under 6A.

Council reasons for taking forward the preferred option

4.25 The Council prefers Option 6B as it would have significant benefits in terms of encouraging sustainable modes of travel with consequent positive impacts in terms of improving health, addressing air pollution and mitigating climate change. Option 6A has considerable uncertainty at present and benefits may not materialise for several years. It could, depending on scheme

design details (that will not emerge for a number of years) have potential for adverse localised impacts on biodiversity and the historic environment. Option 6C would fail to encourage sustainable forms of transport with consequent negative impacts on health, air quality and mitigating climate change.

Relevant Local Plan policy/policies

- S2: Infrastructure Planning Strategy.
- S3: Climate Change Strategy.
- M16: Travel Management.
- M17: Active Travel, Access and Parking.

Strategic Site Options

4.26 In addition to the Main Plan Options, the Preferred Options Consultation Document included three strategic sites:

- Ebbsfleet Central.
- Hythe Street/Kent Road (being the former Co-Op and Westgate Car Park site in Dartford town centre).
- Littlebrook Power Station.

4.27 The options for Ebbsfleet Central were considered in the SA of the Ebbsfleet Central Area Main Plan Options set out above. The options for the Hythe Street/Kent Road site and the Littlebrook Power Station were separately appraised, as these form distinct components in a wider policy approach in the Local Plan Review.

Hythe Street/Kent Road

4.28 This Strategic Site Option comprised two options:

- Option A: Mixed use redevelopment, part of town centre regeneration. It will be allocated for: leisure uses, a new primary care health hub and residential development. Development will be expected to retain the Co-op façade on Spital Street, provide active uses on street frontages and incorporate a public square.
- Option B: Residential-led development.

SA Conclusion

4.29 With the exception of SA objective 1 (Housing), Option A performs as well as, and sometimes better, against the SA objectives than Option B.

Council reasons for taking forward the preferred site option

4.30 Option A is preferred as the Hythe Street/Kent Road site would have a key role in transforming Dartford Town Centre by providing a diversification of uses, including leisure facilities which would assist the evening economy and a health facility. Option B would not contribute to this transformation and is less likely to provide key services and facilities.

Relevant Local Plan policy/policies

D4: Westgate allocation.

Former Littlebrook Power Station

4.31 This Site Option comprised two options:

- Option A: Brownfield land for employment / high tech logistics (up to 88,000 sqm) with greenspace and infrastructure appropriate for its location and riverside setting.
- Option B: Residential-led development.

4.32 It should be noted that Littlebrook Power Station has been granted planning permission for employment use and is therefore now a commitment. It forms an extension to The Bridge Identified Employment Area (set out in Policy M21: Identified Employment Areas of the Local Plan).

SA Conclusion

4.33 The differences between the two options against the SA objectives are not that distinct. Option A would provide a significant contribution to the economy whereas Option B would provide a significant contribution to meeting the Borough's housing needs. However, both options are likely to generate traffic impacts and associated pollution and carbon emissions. The site lies close to the strategic road network, and is a significant difference from existing centres, and therefore probably lends itself more to economic development (albeit it has no train access).

4.34 As permission for employment use has been granted for the site, it is not included in the Local Plan as a site allocation and residential-led development is no longer considered a reasonable alternative.

Council reasons for taking forward the preferred site option

4.35 The Council's preference is Option A as the former Littlebrook Power Station site would have a key role in providing new jobs. It was previously in industrial use and the area to the east already has planning permission for employment use. Option B is ruled out as the provision of residential led development in this location is likely to lead to a poor environment for any future occupiers, located between the Long Reach Sewage Treatment Works to the west and a new employment area to the east. It is also not within easy access of supporting services and facilities for residents

Relevant Local Plan policy/policies

4.36 As this site is now a commitment, it is not allocated in the plan. However, the Council considers Littlebrook Power Station to be an extension to The Bridge Identified Employment Area, and therefore Policy M21: Identified Employment Areas is relevant.

Preferred Policy Approaches

4.37 This section summarises the findings of the SA of the Preferred Policies approach component of the Consultation Document. In many instances, the Preferred Policies are based on the work presented in the Main Options part of the Consultation Document, the SA of which is described above.

4.38 The Preferred Policies Approach covered the following themes:

- Pattern of development and Green Belt in the Borough.
- Development delivery and housing location criteria.
- Infrastructure.

- Town centres and retailing.
- Ebbsfleet Garden City.
- Business premises and employment.
- Natural environment and open space.
- Water management and renewable energy.
- Affordable housing.
- Housing type and size.
- Gypsies, travellers and travelling showpeople.

4.39 It should be noted that, at that stage of Local Plan preparation, the Preferred Policies had not been presented as policy wording with supporting text, but as a narrative of the intended policy direction.

Pattern of Development and Green Belt in the Borough

4.40 The Preferred Policy approach is to focus development on the two Priority Regeneration Centres of Dartford Town Centre and Ebbsfleet Garden City. It allows for some brownfield development at locations well located for public transport and within villages. It does not allow for any strategic release of Green Belt land.

4.41 The Preferred Policy approach derived primarily from the Main Plan Option 1, for which four alternative options were appraised. No further alternatives had been appraised.

SA Conclusion

4.42 The Preferred Policy approach scores well against many of the SA objectives, with significant positive effects recorded against SA objective 1 (Housing), SA objective 2 (Services and facilities) albeit mixed with a minor negative effect, SA objective 3 (Community cohesion), SA objective 4 (health and inequalities) albeit mixed with a minor negative effect, SA objective 5 (Economy), SA objective 6 (Sustainable travel), SA objective 8 (Soils), and SA objective 12 (Climate change), albeit mixed with a minor negative. The primary reason for these significant positive effects is that the development strategy concentrates development primarily on brownfield land at locations that are well located for public transport, jobs and services and facilities, or where it is planned there will be investment in such assets and services.

4.43 A significant positive and significant negative score was recorded against SA objective 10 (Air pollution). Although the spatial strategy should ensure that there is less need to travel by car, it is still likely to result in increased traffic in the Air Quality Management Areas (AQMAs) where reducing air pollution is a priority.

4.44 Minor, often mixed, effects were recorded for the remaining SA objectives. In coming to this conclusion, it is assumed that concentrating development on brownfield land and the Priority Regeneration Centres should help to avoid significant adverse effects, although this will be very much dependent upon the precise location and design of development, including any mitigation measures to ensure no significant effects arise. For example, there is potential for a high amount of growth to come forward in close proximity to Bakers Hole SSSI, Swanscombe Skull Site SSSI and NNR as well as Alkerden Lane Pit and Dartford Marshes Local Designated Wildlife Sites, and development within Dartford Town Centre will need to take into account the listed buildings, conservation area and other historic assets that characterise this part of the Borough.

4.45 Development in northern urban areas, including much of the Priority Regeneration Centres would fall within high Flood risk areas, which means that

an uncertain significant negative effect is recorded, as these areas also benefit from flood defences.

Council reasons for taking forward the preferred policy approach

4.46 This is the Council's Preferred Policy approach as it ensures that development is concentrated in the urban area where there is best access to services, facilities and sustainable modes of transport whilst protecting the Green Belt. This approach complies with national planning policy.

Relevant Local Plan policy/policies

- S1: Borough Spatial Strategy.
- M5: Designated Heritage assets.
- M6: historic environment strategy
- M9: Sustainable housing locations.
- M13: Green Belt in the Borough.
- E3: Swanscombe.

Development Delivery and Housing Location Criteria

4.47 This Preferred Policy approach is to provide for 797 to 865 homes per annum, with the focus of development on brownfield land, strategic allocations, and the Priority Regeneration Centres of Dartford Town and Ebbsfleet Central. The Preferred Policy approach sets out criteria for the consideration of windfall development (Option B1).

4.48 An alternative of delivering a higher level of housing was also considered by the SA (Option B2).

SA Conclusion

4.49 The SA found that the Preferred Policy approach performed better than the alternative of delivering higher housing numbers, particularly with regards to SA objectives 6 (Sustainable travel), 12 (Climate change), 13 (Biodiversity), 14 (Historic environment) and 15 (Landscape). The Consultation Paper does not describe in detail how a higher housing figure would be delivered, although this could not be accommodated within the Preferred Options set out, therefore it was assumed it could lead to higher density development in Dartford town centre, maximising use of brownfield land (including in rural areas), and greater greenfield land take.

4.50 Both the Preferred Approach and the higher housing alternative were recorded as having significant positive effects against a number of SA objectives, being SA objective 1 (Housing), SA objective 2 (Services and facilities), SA objective 3 (Community cohesion), SA objective 4 (Health inequalities), SA objective 5 (Economy), and SA objective 8 (Soils), albeit in some cases this was also accompanied by a negative effect to reflect, for example, the additional pressure that could be placed on services and facilities to support the additional housing growth. For SA objective 2 (Services and facilities), SA objective 3 (Community cohesion) and SA objective 4 (Health inequalities), SA objective 3 (Community cohesion) and SA objective 4 (Health inequalities), the significant positive effect for Option B2 is mixed with a significant negative effect, as the higher level of development included in Option B2 would require a higher level of development would be provided away from areas with good access to existing services and facilities and away from existing sustainable transport links.

4.51 As with the Spatial Strategy, the potential for significant negative effects on SA objective 10 (Air pollution) were identified, and the potential for significant adverse effects on SA objective 11 (Flood risk) were also noted for both options.

4.52 As with the Spatial Strategy, the SA recorded minor negative effects for most other SA objectives. Similar issues were identified for SA objective 13 (Biodiversity) and SA objective 14 (Historic environment) as the SA of the Spatial Strategy. However, for Option B2, significant negative effects (mixed with minor positive effects) were identified for SA objectives 12 (Climate change), 13 (Biodiversity), 14 (Historic environment) and 15 (Landscape). This is because this option will require greater greenfield land take and is likely to result in high density development in Dartford town centre, due to the higher level of development.

Council reasons for taking forward the Preferred Policy approach

4.53 Option B1 is the Council's Preferred Policy approach. This would ensure that the Local Plan addresses housing needs in the Borough whilst allowing some flexibility should this change over time. Much of this could be achieved on brownfield land. Option B2 has been discounted as it is likely that this would require the release of more greenfield land, possibly including land in the Green Belt and/or dense development at locations without good public transport.

Relevant Local Plan policy/policies

- S1: Borough Spatial Strategy.
- S4: Borough Development Levels.
- M2: Environmental & Amenity Protection.
- M9: Sustainable housing locations.
- M11: Extensions New Dwellings & Garden Land.

Infrastructure

4.54 This section of the Consultation Paper sets out the Preferred Policy approach to infrastructure, with respect to transport, community services such as health and education, plus flood management. It focuses on the need to alleviate congestion, and the importance of providing for public transport improvements, also making provision for an extension of Crossrail (the Elizabeth Line). It also sets out the funding arrangements.

4.55 The Preferred Policy approach derives from Main Plan Options for Transport. No further alternatives were identified.

SA Conclusion

4.56 The SA found that the Preferred Policy approach to infrastructure is likely to result in primarily positive effects. Significant positive effects were identified for SA objective 2 (Services and facilities), SA objective 4 (Health and inequalities), SA objective 5 (Economy), SA objective 6 (Sustainable travel), SA objective 10 (Air pollution), SA objective 11 (Flood risk) and SA objective 12 (Climate change).

4.57 Although there is considerable emphasis on public transport improvements, and the provision of community services to support new development, it also provides for junction improvements and road upgrades which, although designed to alleviate congestion, could facilitate increased car travel, which potential effects on Sustainable travel, air quality and carbon emissions, so minor negative effects are also identified for these SA objectives.

4.58 An uncertain significant effect was identified for SA14 (Historic environment), due to the potential for harm to designated assets resulting from upgrades to the A2 and the extension to Crossrail. Similarly, significant adverse effects were identified for SA objective 13 (Biodiversity) due to the potential for

habitat fragmentation, disruption to ecological networks, and disturbance from noise and light to sensitive species from new transport infrastructure.

Council reasons for taking forward the Preferred Policy approach

4.59 This is the Council's Preferred Policy approach for infrastructure as it ensures that services, facilities and transport infrastructure are planned to take account of the location and timescales for new development. It involves close coordination with service providers to identify what infrastructure is required and when.

Relevant Local Plan policy/policies

- S2: Infrastructure Planning Strategy.
- M16: Travel Management.
- M17: Active Travel, Access and Parking.
- M18: Community Uses.

Town Centres and Retailing

4.60 This section of the Consultation Paper sets out the Preferred Policy approach to Dartford Town Centre, including residential, retail and other uses, and diversification, how the Town Centre's historic character will be taken into account, plus other aspects relevant to the operation of the Town Centre such as movement and smart technology. It identifies Town Centre regeneration locations, including the Hythe Street/Kent Road (Westgate) site, which is subject to separate SA as reported above.

4.61 It refers to the potential relocation of Dartford station, which could open up new opportunities for regeneration at Station Quarter and Prospect Place, but

this has not been subject to SA at this stage because details are only beginning to emerge.

4.62 The Preferred Policy approach goes on to set out the network of shopping centres across the Borough, from Bluewater regional shopping centre, to Ebbsfleet, District and Neighbourhood Centres, describing the Preferred Policy approach for each to ensure they support rather than compete with one another. A more detailed policy approach is proposed for Bluewater, which focuses on remodelling and repurposing existing space, and considering the potential for appropriate leisure and sports provision, and potentially residential and small-scale employment uses.

4.63 Although no specific reasonable alternatives are identified, the SA has been broken down into the two main components of the Preferred Policy approach, being Preferred Approach D1, which relates to Dartford Town Centre and Town Centre Regeneration Locations, and Preferred Approach D2, being Borough-wide and Bluewater. For clarification, these are two parts of a single approach, rather than alternative options.

SA Conclusion

4.64 The Preferred Policy approach for Dartford Town Centre and the Regeneration Locations was considered to have a large number of significant positive effects, being against SA objective 1 (housing), SA objective 2 (Services and facilities), SA objective 3 (Community cohesion), SA objective 4 (Health and inequalities), SA objective 5 (Economy), SA objective 6 (Sustainable travel), SA objective 8 (Soils), SA objective 10 (Air pollution), and SA objective 12 (Climate change). These significant positive effects of investing in the established town centre and in the regeneration locations, which provide an opportunity to strengthen and diversify the mix of uses, although within easy reach of one another, and in good proximity of a range of public transport options. Some of the significant positive effects were mixed with minor negative effects, to reflect issues such as the potential to overburden existing services and facilities, and possible increased congestion affecting air pollution within the AQMA.

4.65 Only two significant negative effect were identified for the Preferred Policy approach for Dartford Town Centre and the Regeneration Locations, and this was with respect to SA objective 11 (Flood risk), recognizing that parts of the Town Centre lie within Flood Zones 2 and 3. However, the appraisal acknowledges that the Town Centre benefits from flood defences, so an uncertain effect is recorded. The other potential significant negative effect was with respect to SA objective 14 (Historic environment) given the wealth of historic assets within Dartford Town Centre. However, this acknowledged within the Preferred Policy approach, which states that heritage assets are an irreplaceable resource and proposals affecting heritage assets or their setting and need to take into account the significance of the assets. It states that it will ensure that development is sensitively designed in reflecting the town's unique historic character. The significant negative effect was therefore recorded as uncertain and accompanied by a minor positive effect.

4.66 With respect to the Preferred Policy approach to retailing Borough-wide and Bluewater in particular, only one significant positive effect was identified, which was in relation to SA objective 5 (Economy), because of the employment and economic benefits that derive from retailing, particularly given the regional significance of Bluewater. The significant positive effect was accompanied by a minor negative effect in recognition of potential disruption to traffic from further investment at Bluewater, and the knock-on impacts this can have on other sectors of the local economy.

4.67 Minor effects were recorded for all the other SA objectives for the Boroughwide and Bluewater Preferred Policy approach, with the exception of SA objective 14 (Historic environment), which is assessed as having a mixed minor positive and significant negative uncertain effect. Whilst most district and neighbourhood centres do not include conservation areas or listed buildings, there are a number of designated and non-designated assets across the Borough that could be affected by development, depending on where this comes forward. Bluewater has less in the way of historic interest although a Grade II listed building is within close proximity (although it is noted that Bluewater is set down in a quarry, which could minimize any effects on the listed building).

Council reasons for taking forward the Preferred Policy approach

4.68 The approach for Dartford Town Centre (D1) takes on board the opportunities to remodel existing shopping centres, diversify uses to promote more of an evening economy, provide further residential development to support the retail and leisure uses, and provide better services and facilities. It is recognised that there are potential negative effects in terms of flood risk from developing in Dartford town centre, but the Council considers that the wider regeneration benefits of transforming the town centre will outweigh this. In terms of wider preferred approach to retail (D2), the focus will be on retaining the role of Bluewater as a regional centre and the network of district and neighbourhood centres.

Relevant Local Plan policy/policies

- D1: Central Dartford Strategy.
- D2: Central Dartford Development Principles.
- D3: The mix of uses in Dartford Town Centre.
- M19: Sustainable Economic Locations.
- M22: Bluewater.
- M23: District and Local Centres.

Ebbsfleet Garden City

4.69 This Preferred Policy approach sets out the proposals to create Ebbsfleet Garden City, which will comprise a mixed-use development, focused on Ebbsfleet International rail station, with interchanges with Northfleet station, linked into Fastrack and the local bus network. It includes the strategic site of Ebbsfleet Central which will comprise residential, employment, health, leisure, education, restaurants/bars and retail, with the potential to include a centre of

excellence for medical, education and learning purposes. The proposals for Ebbsfleet Garden City incorporate open space and structural green space.

4.70 The Preferred Policy approach also includes proposals for Swanscombe Peninsula, where the focus for development will be on brownfield land in the south/centre of the Peninsula (predominantly west of High-Speed rail/tunnel) and to the north of Swanscombe Town/Ebbsfleet Central Area. The main priority for development will be employment uses (including upgrades to existing employment areas) and improved transport links including Fastrack. Provision is also made for outdoor/ leisure uses and possible low-key visitor accommodation; plus local scale neighbourhood uses facilitated by limited residential development. The proposals include the creation of an ecological estuarine park (from Black Duck Marsh north-eastwards to the tip of the peninsula and adjoining land).

4.71 The Preferred Policy approach derives from Main Plan Options for Ebbsfleet Central and Swanscombe. No further alternatives were identified.

SA Conclusion

4.72 The Preferred Policy approach scored well against many of the SA objectives, with likely significant positive effects identified for SA objective 1 (Housing), SA objective 2 (Services and facilities), SA objective 3 (Community cohesion), SA objective 4 (Health and inequalities), SA objective 5 (Economy). These scores were in recognition of the range of uses, and the creation of a community with homes, jobs and a good range of services and facilities.

4.73 The Preferred Policy approach also recorded likely significant positive effects against SA 6 (Sustainable travel), SA objective 10 (Air pollution) and SA objective 12 (Climate change) albeit these were mixed with potential minor negative effects. The significant positive effects were identified because of the emphasis on high quality public transport services and interchanges, which will help to address air pollution and carbon emissions from transport. However, it also recognized that development at this scale will inevitably generate additional
traffic, some of which could add to pollution along the AQMA corridors, particularly London Road.

4.74 Similarly, a significant positive effect was identified for SA objective 13 (Biodiversity) mixed with a minor negative effect, reflecting both the creation of an ecological park and the incorporation of waterscapes, open space and green infrastructure, but noting that the site includes a Local Wildlife Site as well as Bakers Hole SSSI, designated for its geodiversity.

4.75 Potential significant negative effects SA objective 7 (Mineral resources), given that parts of both the Ebbsfleet Central site and Swanscombe Peninsula is with Minerals Safeguarding Areas. A significant negative effect was recorded for SA objective 11 (Flood risk), because of the existence of Flood risk Zones 2 and 3 in this location, although a minor positive was also recorded because the area benefits from flood defences, and some of the proposals, such as the ecological estuarine park, could help manage Flood risk. An uncertain significant negative effect was identified for SA objective 14 (Historic environment), because the area contains a number of areas of archaeological potential, a site of archaeological significance, as well as scheduled monuments and listed buildings.

Council reasons for taking forward the Preferred Policy approach

4.76 The Council is taking forward this Preferred Policy approach as it reflects the principles of Ebbsfleet Garden City and the Ebbsfleet Implementation Framework. Ebbsfleet Central would provide a mixed use, city scale development taking advantage of its proximity to Ebbsfleet International Station, with significant positive benefits in terms of access to services and facilities.

Relevant Local Plan policy/policies

E1: Ebbsfleet Garden City Strategy.

- E2: Ebbsfleet Garden City Development Principles.
- E5: Ebbsfleet South and West Area.
- E6: Land North of Swanscombe Area.

Business Premises and Employment

4.77 The Preferred Policy approach for Business Premises and Employment builds on the high level of job growth and economic regeneration experienced by the Borough in recent years. It provides for a mix of premises, with encouragement for knowledge based, creative or high technology industries, with a focus on locations well served by public transport. Intensification and new job provision will be supported at selected sustainable locations, where consistent with improving environmental quality. It also supports a prosperous rural economy.

4.78 Two strategic allocations are identified, one at Ebbsfleet Central, which is appraised as part of the proposals for Ebbsfleet Garden City, and the other at Littlebrook Power Station, which is separately appraised, with the findings reported above.

4.79 Two alternatives were appraised to the Preferred Policy approach (F1) being not intensifying employment sites (F2) and releasing employment land for other uses (F3).

SA Conclusion

4.80 The Preferred Policy approach recorded a significant positive effect against SA objective 5 (Economy) because of its strong support for economic and job growth. Significant positive effects were also recorded for SA objective 8 (Soils), because of the focus on brownfield land but with a minor negative effect to reflect that a risk that best and most versatile agricultural land could also potentially be developed.

4.81 A mixed significant positive and significant negative effect was identified for SA objective 13 (Biodiversity), because the brownfield focus will minimise undeveloped habitats being developed, but recognises that brownfield land can have its own biodiversity interest, and that Littlebrook Power Station is in a Biodiversity Opportunity Area and Ebbsfleet Central partially contains a Local Wildlife Site and SSSI. It is noted though, that the proposals for Littlebrook Power Station include 30% greenspace and 10% net biodiversity gain to be delivered, so uncertainty is also recorded depending upon its deliverability.

4.82 A significant negative effect was identified for SA objective 11 (Flood risk) because of the former Littlebrook Power Station falls entirely within Flood Zone 3 and parts of Ebbsfleet Central do.

4.83 The alternatives considered do not perform noticeable better than the Preferred Policy approach. Alternative F2, which would not lead to the intensification of employment sites is, in practice, a continuation of the status quo, so no significant effects were identified, whether positive or negative. Alternative F3 performed poorly against SA objective 5 (Economy) because it would lead to a reduction or loss of existing employment sites, although a significant positive effect was recorded against SA objective 8 (Soils), because it would release previously developed sites for other uses. In many instances there was uncertainty about the effects of the alternatives because of the lack of detail about what they would mean with respect to, for example, housing delivery.

Council reasons for taking forward the Preferred Policy approach

4.84 The Preferred Policy approach is F1 as it would ensure that more jobs are provided by making the most efficient use of existing employment areas and identifying appropriate sites well supported by public transport This would continue the longstanding strategy of regenerating the Borough. Options F2 and F3 would have negative effects on the Borough's economy and contravene the vision for regeneration of the area.

Relevant Local Plan policy/policies

- M19: Sustainable Economic Locations.
- M20: Provision for Local Business and Skills.
- M21: Identified Employment Areas.

Natural Environment and Open Space

4.85 The Preferred Policy approach is to maintain an overarching strategy to create a multi-functional network of green spaces, protecting and enhancing biodiversity, retaining open space and playing pitches, and to ensure that new development provides for good quality amenity space, community resident space and public open space. The Preferred Policy approach seeks to protect and enhance designated sites, features and habitats, and requires new developments to provide for biodiversity net gain.

4.86 The Preferred Policy approach builds on Main Plan Option on Greenspace Strategy appraised above. No further alternatives were identified for appraisal.

SA Conclusion

4.87 The SA of the Preferred Policy approach found that it would have positive effects for a number of SA objectives, in particular for SA objective 4 (Health and inequalities) and SA objective 13 (Biodiversity) for which significant positive effects were identified. This is because the Preferred Policy approach is to safeguard and enhance green space and biodiversity assets, including making provision for new open space in new developments and net biodiversity gain. These should have significant positive benefits not only for biodiversity but also for people's health and wellbeing. No significant negative effects were identified.

Council reasons for taking forward the Preferred Policy approach

4.88 The Preferred Policy approach is in accordance with national planning policy. It would have significant benefits in terms of improving health and enhancing biodiversity. It would also have a number of other positive impacts, including mitigating flood risk and climate change.

Relevant Local Plan policy/policies

- M10: Residential Amenity Space.
- M14: Green and Blue Infrastructure and Open Space Provision.
- M15: Biodiversity and Landscape.

Renewable Energy and Water Management

4.89 The Preferred Policy approach to Renewable Energy and Water Management addresses the need for the Borough to mitigate (i.e. reduce carbon and other greenhouse gas emissions) and adapt to (i.e. ensure the Borough is resilient to a changing climate such as extreme weather events) climate change.

4.90 With respect to climate change mitigation, the Preferred Policy approach encourages energy efficiency in the built environment and transport, the encouragement of renewable and low carbon energy sources. For climate change adaptation, the Preferred Policy approach is to encourage water efficiency in new development and minimise Flood risk.

4.91 No reasonable alternatives were identified.

SA Conclusion

4.92 The Preferred Policy approach is likely to give rise to positive effects for many of the SA objectives. Significant positive effects were identified for SA objective 11 (Flood risk) and SA objective 12 (Climate change) given the Preferred Policy approach's focus on these two aspects of sustainability. No significant negative effects were identified.

Council reasons for taking forward the Preferred Policy approach

4.93 The Preferred Policy approach is in accordance with national planning policy. It would have significant benefits in terms of mitigating flood risk and climate change. It would also have a number of other positive impacts, including health and water and air quality.

Relevant Local Plan policy/policies

- S3: Climate Change Strategy.
- M3: Sustainable Technology Construction & Performance.
- M4: Flood Risk and Riverside Design.

Affordable Housing

4.94 The Preferred Policy approach aims to deliver a mix of housing tenures, including an increase in affordable housing. It sets out threshold criteria to be applied to development proposals to determine whether they should contribute to the affordable housing needs of the Borough. The Preferred Policy Approach will require proposals in the urban area of 15 dwellings (or 0.5ha) or more to contribute to the provision of affordable housing provision and, south of the A2, the threshold for seeking affordable housing provision will be a minimum of 10

dwellings. The Preferred Policy approach is to require a 35% affordable housing target subject to viability.

4.95 Two reasonable alternatives were identified to the Preferred Policy approach (I1). One reasonable alternative was to apply a Borough-wide threshold of 10 dwellings for the delivery of affordable housing (I2). The other was to retain the current overall target for affordable housing of 30% on qualifying sites (I3).

SA Conclusion

4.96 The Preferred Policy approach and the two reasonable alternatives were considered to affect only a small number of SA objectives. All three approaches were considered likely to result in significant positive effects with respect to SA objective 1 (Housing). In all instances, it was considered that minor negative effects against this objective may also materialise, with respect to I1 and I2, because the higher thresholds may slow down delivery, and for I3, because it may be less likely to meet the full housing needs of the Borough.

Council reasons for taking forward the Preferred Policy approach

4.97 The Council's Preferred Policy approach is Option I1 as it addresses the needs for affordable housing set out in the Dartford and Ebbsfleet Residential Needs Assessment whilst recognising that developments in the urban area are likely to be larger than developments in the rural area. The percentage requirement and thresholds will be subject to a viability assessment. Option I2 could have an adverse impact on the viability of development and not be effective in practice in any event, and Option I3 would mean that the plan would not be able to meet the identified affordable housing needs.

Relevant Local Plan policy/policies

M7: Affordable Housing.

Housing Type and Size

4.98 The Preferred Policy approach is to provide for a range of dwelling sizes and types designed and located in accordance with the future needs of Dartford's population. This includes considering the lifetime requirements of the population, such as disabled, younger and older people, and families.

4.99 No reasonable alternative policy approach was identified.

SA Conclusion

4.100 The Preferred Policy approach was considered likely to result in significant positive effects against SA objective 1 (Housing) and SA objective 4 (Health and inequalities), because it would deliver the range of homes needed in the Borough and would provide for those in need of special housing such as the elderly and disabled.

Council reasons for taking forward the Preferred Policy approach

4.101 The Council wishes to ensure that the type and size of housing provided in the Borough meets the needs of different sectors of the population, including families and elderly/disabled people. In light of this, the Plan will set out requirements for the provision of accessible/adaptable housing and larger family homes. This will have significant positive impacts in terms of the SA objectives relating to housing and health and inequalities.

Relevant Local Plan policy/policies

M8: Housing Mix.

Gypsies, Travellers and Travelling Showpeople

4.102 The Preferred Policy approach identifies the need to deliver 48 additional permanent pitches for gypsies and travellers (which does not equal 48 new sites) and 1 additional permanent plot for travelling showpeople. This need will be accommodated within existing authorised site boundaries, sites occupied under temporary planning permission where permanent planning permission will be granted, small scale extensions to existing authorised sites, and potentially sites within Ebbsfleet Garden City. If these sites are unable to meet need, new sites would be researched.

4.103 No reasonable alternative policy approach was identified.

SA Conclusion

4.104 Significant positive effects were identified for the Preferred Policy approach with respect to SA objective 1 (Housing), because it would meet the housing needs of the gypsies, travellers and travelling showpeople community.

4.105 Each of the potential sites listed in the Preferred Policy approach was examined to see whether they would be likely to give rise to significant effects. Although a number of potential effects were identified, both positive, for example with respect to proximity to open space and public transport, and negative, for example with respect to proximity to designated biodiversity sites and heritage assets, in all instances the effects were considered uncertain, and not great enough to warrant being identified as significant effects.

Council reasons for taking forward the Preferred Policy approach

4.106 Whilst there could be impacts on the landscape, soils and other sustainability objectives, the Council is required to meet the needs of gypsies, travellers and travelling showpeople. The preferred policy approach reflects deliverable options for the provision of sites to meet these needs.

Relevant Local Plan policy/policies

M12: Gypsy, Traveller and Travelling Showpeople Accommodation.

Approach to Green Belt

4.107 In response to the consultation on the Preferred Options Consultation Document, some consultees suggested that Dartford Borough Council should consider alternative spatial strategies that include Green Belt release. In particular, it was suggested that the Council should consider Green Belt release in the south of the Borough. This would form one or more alternatives to the 'pattern of development and Green Belt in the Borough' policy approach discussed above.

4.108 The Preferred Options Consultation Document did not provide an option for Green Belt release, although an additional option, Main Plan Option 1D (Reject a brownfield land focus, in favour of new growth locations elsewhere in the Borough, including more dispersed development that may include locations within the Green Belt), was considered through the SA process. This is because paragraph 138 of the NPPF states that, once established, Green Belt boundaries should only be altered where exceptional circumstances are fully evidenced and justified. Given that Dartford's development needs can be met outside the Green Belt, the Council has not identified any exceptional circumstances for the release of Green Belt land in the Borough.

4.109 In addition, it should be noted that the SA found that Option 1D would have a large number of significant negative effects, compared to the preferred option.

Reasons for Choosing the Plan

4.110 The Council's reasons for choosing the preferred policies, as presented in the Proposed Submission Local Plan, are set out below. These also describe how the SA helped to influence the selection and development of the preferred policies, along with other evidence.

How environmental and sustainability considerations have been integrated into the new Local Plan

4.111 The Sustainability Appraisal has been conducted in such a way that meets the requirements of the EU Strategic Environment Assessment Directives (including through EU exit legislation) and UK Government guidance on the preparation of Sustainability Appraisals. As required by the Regulations, the Sustainability Appraisal has informed decision making at every stage of developing the Dartford Local Plan.

4.112 The SA Scoping Report (2019) established social, environmental and economic baselines. It identified the key sustainability issues to be addressed and provided the basis on which the potential effects of the Local Plan could be assessed.

4.113 The Preferred Options Local Plan January 2020 (under Regulation 18 of the Local Plan Regulations) and the Pre-Submission (Publication) Local Plan (under Regulation 19 of the Local Plan Regulations) were appraised in accordance with the Scoping Report. The Preferred Options Local Plan

included a list of policies that were proposed to be retained from the adopted Development Policies Plan 2017. These had already been subject to Sustainability Appraisal at the time that they were being brought forward. This was reflected in the Sustainability Appraisal published alongside the Preferred Options Local Plan.

How the Sustainability Appraisal has been taken into account

4.114 The policy approach and strategic development locations have been subject to Sustainability Appraisal throughout their development, along with reasonable alternative options. Each policy and proposal has been assessed against the social, environmental and economic objectives in the SA Framework in order to establish the likely positive and negative effects. Where significant effects were found, potential mitigation measures were identified wherever possible. These were incorporated into the Plan where they were not already addressed by more detailed policies elsewhere in the Plan. The results of the appraisals were used to inform the decision making process and establish appropriate options to take forward in the Local Plan.

4.115 The SA of the Preferred Options Consultation Document (2019) included individual appraisals for each preferred policy approach and reasonable alternative options that were considered at the Preferred Options stage, which are summarised in this chapter. The reasons for taking forward the preferred options are also set out above. The Sustainability Appraisal assesses each of the policies set out in the Pre-submission Local Plan (Chapter 5). It also includes an overview of all of the policies included in the Pre Submission Local Plan to show the cumulative impact of the policies (Chapter 6).

How the results of consultation have been taken into account

4.116 The SEA Directive requires that opinions expressed by consultees be taken into account during the development of a plan before the plan is adopted. The Sustainability Appraisal was consulted on alongside consultation on the Preferred Options Local Plan. All comments and representations were taken into account and used to further refine the Sustainability Appraisal.

4.117 As set out in the Consultation Statement, there was significant support for the preferred options and policy approaches set out in the Preferred Options Local Plan. These have largely been taken forward into the Pre-Submission Local Plan with some modifications to take account of comments from consultees.

4.118 A number of consultees raised the issue of the need for further evidence to support the Plan and a number of evidence based studies have since been produced, including the Viability Study, Retail and Commercial Leisure Study, Strategic Flood Risk Assessment, and the Transport Study. These largely supported the approaches set out in the Preferred Options but, where necessary, adjustments to the policies have been made in accordance with the outputs from the evidence.

4.119 A number of developers raised the issue of whether the proposed pattern of development is appropriate and whether there was a need to release Green Belt land. The evidence demonstrates that the Council can meet development needs in the urban area which is in accordance with national planning policy. This is discussed under 'Approach to Green Belt' above. Also see relevant consultation comments and responses to these in Appendix A.

The reasons for choosing the Local Plan in light of reasonable alternatives considered

Level of Growth

4.120 Section 5B of the Preferred Options put forward the preferred approach of a range of homes per annum to meet national objectively assessed needs but also questioned whether an alternative upper figure would be appropriate. The Strategic Housing Land Availability Assessment, Housing Land Supply, Residential Needs Assessment and Housing Trajectory demonstrate that the approach of meeting national objectively assessed housing needs is appropriate and based on the evidence. Policy S4 of the Pre-Submission Local Plan includes a defined rate for the annual average delivery of dwellings over the plan period which, based on latest developable supply data, satisfies the current national standard method local housing needs.

4.121 Section 5F of the Preferred Options set out the preferred approach towards employment development, focusing on the significant local capacity to grow employment areas (particularly through proposals in the pipeline e.g. at Littlebrook) but questioned whether there were any reasonable alternative options. The Employment Needs Review Paper and Retail and Commercial Leisure Study examined future needs for employment, commercial and retail development. As no evidence was submitted to justify an alternative approach, and the growth strategy accords with national policy, the amount of employment, commercial and retail development set out in Policy S4 of the Pre-Submission Local Plan reflects the evidence, taking into account the planning permissions and needs.

Distribution of Development and Allocations

4.122 Preferred Options 1B, 2B and 4B sought to focus development on brownfield land very well served by public transport, encourage redevelopment

of selected areas in around Dartford Town Centre, and create a distinctive mixed and lively urban heart for Ebbsfleet Garden City and the wider area. The Strategic Housing Land Availability Assessment, Housing Land Supply, Housing Trajectory, Retail and Commercial Leisure Study, and Employment Needs Review Paper demonstrate that these preferred options are appropriate, accord with national planning policy and meet needs arising in the Borough over the plan period.

4.123 Policy S1 of the Pre-Submission Local Plan maintains the long-standing approach of regeneration by directing development primarily to brownfield sites in the urban area. The focus is on the regeneration of Central Dartford and enabling the continued development of a Garden City at Ebbsfleet.

4.124 Whilst parts of Central Dartford are within a Flood Risk Area, the Strategic Flood Risk Assessment has demonstrated that this can be carried out in a way which is safe for the lifetime of the development and will not increase the risk of flooding elsewhere. As such, development in this location is justified by the regeneration that will occur by redeveloping currently underused and/or poorly functioning sites.

4.125 The strategic allocations in policies D4 (Westgate), D5 (East of Lowfield Street), D6 (Priory Centre) and E4 (Ebbsfleet Central) of the Pre-Submission Local Plan reflect this approach.

4.126 Sections 5D and 5F of the Preferred Options set out the preferred approach towards retail and employment development but that latter questioned whether there were any reasonable alternative options. In response to comments received on Littlebrook Power Station and the planning permission which has since been granted, this in no longer included as a strategic employment site but instead included within an identified employment area.

4.127 On the basis of information in the Employment Needs Review Paper and the Retail and Commercial Leisure Study, Policy S1 of the Pre-Submission Local Plan sets out the approach to the distribution of employment and retail development. The strategic allocations in Policies D4 (Westgate), D5 (East of

Lowfield Street), D6 (Priory Centre) and E4 (Ebbsfleet Central) of the Pre-Submission Local Plan make provision for employment and/ or retail uses which accord with this approach.

Measures that are to be taken to monitor the significant sustainability effects of the implementation of the Local Plan

4.128 A monitoring framework is set out in Section 6 of the Local Plan: Implementation and Monitoring. This has fed into the proposed monitoring measures set out in Chapter 7 of this SA Report. Monitoring enables the significant effects of implementing the Local Plan sites and policies to be assessed and compared to those predicted in this Sustainability Appraisal report. It helps to ensure that any unforeseen adverse effects can be identified, and remedial action taken if required.

Chapter 5 Sustainability Appraisal Findings for the Dartford Local Plan

5.1 This chapter sets out the findings of the SA in relation to the policies presented in the proposed Dartford Local Plan. The assessments are presented by the chapter in which they appear.

Vision and objectives

Table 5.1: SA scores for the Vision and Strategic Objectives

	SA objectives	Vision	W1	W2	W3	W4	W5	11	12	13	14	G1	G2	G3	G4	G5
1.	To ensure that everyone has the opportunity to live in a decent home.	++	++	0	++	++	0	+	0	+	0	0	0	0	0	0
2.	To ensure ready access to essential services and facilities for all residents.	++	++	+	0	0	+	+	+	+	0	0	0	0	0	0
3.	To strengthen community cohesion.	++	++	+	0	0	+	+?	+	+	+	0	+	0	0	0
4.	To improve the population's health and reduce inequalities.	++	+	++	+	+	++	+?	+	+	+	0	+	+	++	+
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	++	0	+	0	0	+	+	+	++	++	0	0	+	0	0

	SA objectives	Vision	W1	W2	W3	W4	W5	11	12	13	14	G1	G2	G3	G4	G5
	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++	+	++	0	0	0	0	++	0	0	0	0	0	++	+?
7.	To conserve the Borough's mineral resources.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.	To conserve the Borough's soils.	0	0	0	0	0	0	++	0	0	0	0	0	0	0	0
9.	To maintain and improve the quality of the Borough's waters.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.	To reduce air pollution and ensure improvements in air quality.	+?	+	+	0	0	0	0	+	0	0	0	0	0	0	0
11.	To avoid and mitigate flood risk.	0	0	0	0	0	0	0	0	0	0	0	0	+	0	++
12.	To minimise the Borough's contribution to climate change.	+?	+	+	0	0	0	0	+	0	0	0	0	++	0	0
	To conserve, connect and enhance the Borough's wildlife, habitats and species.	+?	0	0	0	0	0	+	0	0	0	0	+	++	++	0
14.	To conserve and/or enhance the significant qualities, fabric, setting	+	+	0	0	0	+?	0	0	0	0	+	+	0	0	0

SA objectives	Vision	W1	W2	W3	W4	W5	11	12	13	14	G1	G2	G3	G4	G5
and accessibility of the Borough's historic environment.															
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+	+	0	0	0	0	+	0	0	0	+	+	0	++	0

Vision

5.2 The Vision states that local residents will be able to access a choice of homes to suit their needs at different stages of their life, through a diverse range of accommodation available in a variety of types and tenures. A significant positive effect is therefore expected for SA objective 1 (Housing).

5.3 With regard to SA objectives 2 (Services and facilities) and 3 (Community cohesion), the Vision states that Dartford's towns will be well connected and served by good infrastructure and local facilities. Specifically, the aim is to provide new and upgraded services, including reliable and high frequency transport links, walking and cycling routes and improved local community, cultural, sports and recreational resources. In addition, new settlements will be sensitively integrated with existing communities, bringing new accessible services and green space. Therefore, a significant positive effect is expected for SA objectives 2 and 3.

5.4 The Vision states that Dartford's towns and villages will also be recognised for their proximity to the open countryside and riverside. Furthermore, the neighbourhoods will be sensitively integrated with the local environment, providing new public greenspaces and attractive waterside settings. For example, Ebbsfleet Garden City will be characterised by healthy, green and open environments. This will have a beneficial effect on people's health and well-being. In addition, the Vision states that new development will address social deprivation within neighbourhoods through employment opportunities, facilities and new infrastructure. Therefore, overall, a significant positive effect is expected for SA objective 4: Health and inequality.

5.5 With regard to SA objective 5 (Economy), the Vision states that the Borough will be known across Ken, the Thames Estuary and beyond as a desirable place to work, with a strong economy. In addition, new settlements will be served by walking, convenient and high-quality jobs. It also states that Dartford Town Centre will be supported by a diversified economy and will be the community

heart of Dartford Borough with a thriving, creative and innovative ambience, with the mix and diversity of its offer giving many reasons to come and visit it. Furthermore, the vibrancy of the town centre will be supported by more residents living in the town and may attract more visitors. Therefore, a significant positive effect is expected for SA objective 5.

5.6 According to the Vision, Dartford's towns and villages will be well connected and communities will benefit from reliable transport links. New settlements in the Borough will be served by walkable, convenient and high-quality public transport and existing communities will benefit from frequent, reliable and clean transport links and appealing walking and cycling routes. It also references the rapid public transport connections at Ebbsfleet. Overall, a significant positive effect is expected for SA objective 6 (Sustainable travel).

5.7 The Vision does not directly address Mineral resources (SA objective 7), soils (SA objective 8) and Water quality (SA objective 9). Therefore, a negligible effect is expected for these SA objectives.

5.8 With regard to SA objective 10 (Air pollution), the Vision states that Dartford's towns and villages will be well connected and have new and upgraded services, including reliable transport links and appealing walking and cycling routes. This has the potential to reduce use of the private car, and, combined with the provision of healthy, green environments, particularly those that encourage walking, could help reduce air pollution and go some way to minimising greenhouse gas emissions. As such, a minor positive uncertain effect is expected for SA objectives 10 and 12 (Climate change).

5.9 The Vision does not directly address the avoidance and mitigation of flood risk. Therefore, a negligible effect is expected for SA objective 11 (Flood risk).

5.10 The Vision states that new neighbourhoods will be provided with public greenspaces and that Ebbsfleet Garden City will be characterised by healthy, green and open environments. This suggests that the Borough's wildlife, habitats and species will, to an extent, be protected and additional habitat may be created. However, the Vision does not directly address the conservation,

connection and enhancement of the Borough's wildlife, habitats and species. Therefore, a minor positive uncertain effect is expected for SA objective 13 (Biodiversity).

5.11 According to the Vision, the identity of Dartford's established towns and villages will be retained and enhanced. With regard to Dartford Town Centre, its sense of history will be retained whilst its streets, open spaces and riverside will be further rejuvenated. However, the Vision does not directly address the conservation and enhancement of heritage assets within the Borough. Therefore, a minor positive effect is expected for SA objective 14 (Historic environment).

5.12 Furthermore, new neighbourhoods will be sensitively integrated with existing communities and the local environment, which could have beneficial effects on the landscape across the Borough. However, the Vision does not directly address landscape character. As such, a minor positive effect is expected for SA objective 15 (Landscape).

Objectives for the wellbeing of communities

W1

5.13 Objective W1 aims to achieve cohesive, safe, walkable and attractive neighbourhoods with a sense of place and whose residents enjoy a choice of homes that suit their needs and have easy access to local services and facilities. Therefore, significant positive effects are expected against SA objectives 1 (Housing), 2 (Services and facilities) and 3 (Community cohesion).

5.14 Objective W1 promotes the development of neighbourhoods with a real sense of place that reflects the area's heritage. A minor positive effect is therefore expected for SA objective 14 (Historic environment) and SA objective 15 (Landscape).

5.15 Lastly, as Objective W1 aims to create walkable neighbourhoods it is likely that reliance on the private car will reduce thereby minimising air pollution and minimising greenhouse gas emissions, in addition to encouraging a healthier lifestyle. Therefore, minor positive effects are expected against SA objectives 4 (Health and inequality), 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change).

5.16 A negligible effect is expected for the remaining SA objectives.

W2

5.17 Objective W2 seeks to improve health and wellbeing, air quality and congestion through reducing the need to travel by private car through providing jobs, services, facilities and open space in convenient locations. These locations would be close to residential areas and where it is easily walkable for good public transport services. Therefore, a significant positive effect is expected against SA objectives 4 (Health and inequality) and 6 (sustainable travel). A minor positive effect is expected for SA objectives 2 (Services and facilities) and 3 (Community cohesion) because this will provide residents with easy access to services and facilities and create opportunities for social interaction.

5.18 As Objective W2 aims to reduce the need for a private car by creating walkable neighbourhoods it is likely that reliance on the private car will reduce thereby reducing air pollution and minimising greenhouse gas emissions, in addition to encouraging a healthier lifestyle. Therefore, minor positive effects are expected against SA objectives 10 (Air pollution) and 12 (Climate change).

5.19 The provision of jobs close to where people live and good public transport services could have beneficial effects on the economy of the area by providing residents with easy access to employment opportunities. Therefore, a minor positive effect is also expected for SA objective 5 (Economy).

5.20 A negligible effect is expected for the remaining SA objectives.

W3

5.21 Objective W3 seeks to provide well designed new housing that is mixed, affordable and of varied tenure, sustainable and promotes healthy living. Therefore, a significant positive effect is expected against SA objective 1 (Housing). In addition, the objective aims to secure a good quality of life for residents, as such a minor positive effect is expected against SA objective 4 (Health and inequality).

5.22 A negligible effect is expected for the remaining SA objectives.

W4

5.23 Objective W4 encourages the development of 'whole lifetime' residential accommodation options and facilities; with accessible types and designs of living environments which cater for people as their circumstances change. This is likely to have a significant positive effect on SA objective 1 (Housing).

5.24 Offering a range of accommodation to meet various needs and enabling people to stay in their own homes is more likely to result in residents finding suitable accommodation and maintaining a sense of independence, which could have positive effects for their wellbeing. As such, minor positive effects are expected for SA objective 4 (Health and Inequality).

5.25 A negligible effect is expected for the remaining SA objectives.

W5

5.26 Objective W5 encourages development that provides a wide range of opportunities for residents to enjoy good quality cultural, art, leisure and sports pursuits thereby providing additional services and facilities within the Borough. Therefore, significant positive effects are expected against SA objective 4

(Health and inequality). Minor positive effects are expected against SA objective 3 (Community cohesion) as additional cultural, art and leisure opportunities are likely to bring communities together. In addition, a wide range of opportunities could also bring about employment opportunities for residents, therefore minor positive effects are also expected against SA objective 5 (Economy).

5.27 As this objective encourages the provision of recreational activities, it is likely to have a minor positive effect on SA objective 2 (Services and facilities). Sufficient recreational areas would help support new and growing communities.

5.28 Minor positive effects are also expected against SA objective 14 (Historic environment) as additional cultural and art opportunities could raise awareness around local heritage. However, uncertainty is attached to this SA objective as it is unknown at this stage what opportunities will arise.

5.29 A negligible effect is expected for the remaining SA objectives.

Objectives for infrastructure and economic investment

11

5.30 Objective I1 promotes the continued urban regeneration within the north of the Borough through the re-use of accessible and suitable brownfield land. The re-use of brownfield land will help minimise the amount of greenfield land lost to development, which will have a significant positive effect on SA objective 8 (Soil). Regeneration also has the potential to reduce inequality, levels of crime, anti-social behaviour and fear of crime, with a minor positive effect with uncertainty is expected for SA objectives 4 (Health and inequality) and 3 (Community cohesion).

5.31 Objective I1 states that the urban regeneration through the re-use of brownfield land will help meet future housing and employment needs, as well as supporting services, schools and travel. Therefore, a minor positive effect is expected for SA objectives 1 (Housing), 2 (Services and facilities) and 5 (Economy).

5.32 As Objective I1 aims to re-use brownfield land, it is likely to prevent greenfield land from being developed and as such maintain and protect the local townscape, landscape and biodiversity. As such, it could lead to a minor positive effect with uncertainty against SA objectives 13 (Biodiversity) and 15 (Landscape). This effect is uncertain because brownfield sites can have high biodiversity value.

5.33 A negligible effect is expected for the remaining SA objectives.

12

5.34 Objective I2 aims to facilitate a range of upgrades to the transport network, a choice of sustainable and active travel options, with rapid and reliable public transport linking existing neighbourhoods and developments to key destinations. In addition, a high quality and comprehensive walking and cycling network will be provided. As such, significant positive effects are expected against SA objective 6 (Sustainable travel). The improved active travel options are likely to encourage healthier lifestyles and are therefore expected to have minor positive effects on SA objective 4 (Health and inequality).

5.35 As Objective I2 would provide a range of upgrades to the transport network linking developments to facilities, it is likely to have minor positive effects on SA objectives 2 (Services and facilities), 3 (Community cohesion) and 5 (Economy) as additional linkages will make it easier for residents and visitors to access local services and facilities and employment opportunities.

5.36 Lastly, as Objective I2 aims to upgrade the transport network with rapid and reliable public transport links it is likely that reliance on the private car will

reduce thereby minimising air pollution and minimising greenhouse gas emissions. Therefore, minor positive effects are expected against SA objectives 10 (Air pollution) and 12 (Climate change).

5.37 A negligible effect is expected for the remaining SA objectives.

13

5.38 Objective I3 aims to achieve a vibrant Dartford Town Centre with an attractive public realm in an enjoyable and accessible environment including new residential communities and improved services, leading to a minor positive effect on SA objectives 1 (Housing) and 2 (Services and facilities).

5.39 This objective promotes the development of an attractive and vibrant Dartford Town Centre, which provides a mix of uses to achieve a flourishing day and evening economy with a cultural, retail and leisure offer. Therefore, a significant positive effect is expected for SA objective 5 (Economy).

5.40 Objective I3 also seeks to provide an attractive public realm. This could increase levels of pedestrian activity and outdoor interaction, with a minor positive effect recorded against SA objectives 4 (Health and inequality) and 3 (Community cohesion).

5.41 A negligible effect is expected for the remaining SA objectives.

14

5.42 Objective I4 promotes the retention of a prosperous economy with a good choice of jobs, increasing high quality local employment opportunities, maintaining a diverse supply of premises and supporting existing businesses. It also seeks to deliver a mix of new commercial, community and residential activities within Ebbsfleet. Therefore, a significant positive effect is expected for

SA objective 5 (Economy). Providing community activities at Ebbsfleet could also have a minor positive effect on SA objectives 4 (Health and inequality) and 3 (Community cohesion).

5.43 A negligible effect is expected for the remaining SA objectives.

Objectives for a green and attractive environment

G1

5.44 Objective G1 seeks to maintain a distinct and enduring open environment within the Borough and a positive setting for Dartford's villages, through the protection and enhancement of Green Belt countryside. A minor positive effect is therefore expected for SA objective 15 (Landscape). A minor positive effect is also expected for SA objective 14 (Historic environment) as this objective aims to maintain the positive setting of rural heritage assets.

5.45 A negligible effect is expected for the remaining SA objectives.

G2

5.46 Objective G2 seeks to secure quality and sustainable built design, public streets and good open and amenity space within new development, so that it can be enjoyed by current and future generations. An attractive environment is expected to benefit mental wellbeing and encourage active travel and therefore increasing interactions between residents. A minor positive effect is therefore expected for SA objectives 3 (Community cohesion) and 4 (Health and inequality). High quality design is also expected to have minor positive effects for SA objective 15 (Landscape).

5.47 As this objective also aims for the public realm to recognise and respect heritage and green assets, for current and future generations, a minor positive effect is expected for SA objectives 13 (Biodiversity) and 14 (Historic environment).

5.48 A negligible effect is expected for the remaining SA objectives.

G3

5.49 Objective G3 seeks to ensure that the Borough is able to adapt to the effects of climate change through an increase in the proportion of water efficient buildings, the uptake of domestic and small-scale renewable energy, and promoting environmental resilience, new greenspace and tree planting. Therefore, a significant positive effect is expected for SA objectives 12 (Climate change) and 13 (Biodiversity). Adapting to the impacts of climate change will also have minor positive effects on SA objectives 4 (Health and inequality) and 11 (Flood risk), as building resilience through new greenspace and tree planting may help to protect people against flooding and more extreme weather events.

5.50 Minor positive effects are expected against SA objective 5 (Economy) as building resilience and effectively adapting to the effects of climate change will avoid disruption to the economy and transport networks.

5.51 A negligible effect is expected for the remaining SA objectives.

G4

5.52 Objective G4 promotes sustainable local environments and habitats, achieving biodiversity net gain and active and healthy living, at new developments through greenspace, enhancing the green grid of footpaths, public rights of way, cycle routes, wildlife corridors, rivers and countryside links. Therefore, a significant positive effect is expected for SA objectives 4 (Health and inequality), 6 (Sustainable travel), 13 (Biodiversity) and 15 (Landscape).

5.53 As this objective aims to create additional greenspace and promote sustainable local environments, it is likely the area will become more resilient to the effects of climate change.

5.54 A negligible effect is expected for the remaining SA objectives.

G5

5.55 Objective G5 seeks to ensure that there is no increase in flood risk within the Borough, therefore a significant positive effect is expected against SA objective 11 (Flood risk). In addition, the objective aims to create attractive and accessible riversides, encouraging sensitive recreation and transport. As such, minor positive effects are expected against SA objectives 4 (Health and inequality) and 6 (Sustainable travel). However, the effect against SA objective 6 (Sustainable travel) is uncertain as this assessment is assuming the transport mentioned would be cycling and walking.

5.56 A negligible effect is expected for the remaining SA objectives.

Strategy

Table 5.2: SA scores for Policy S1 - Borough Spatial Strategy

SA objective	S1
 To ensure that everyone has the opportunity to live in a decent home. 	÷ ++
2. To ensure ready access to essential services and facilities for all residents.	++/-
3. To strengthen community cohesion.	+

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SA	objective	S1
4.	To improve the population's health and reduce inequalities.	++/-
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	++
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-
7.	To conserve the Borough's mineral resources.	-
8.	To conserve the Borough's soils.	++/-?
9.	To maintain and improve the quality of the Borough's waters.	-
10.	To reduce air pollution and ensure improvements in air quality.	++/
11.	To avoid and mitigate flood risk.	?
12.	To minimise the Borough's contribution to climate change.	++/-
13.	To conserve, connect and enhance the Borough's wildlife, habitats and species.	++/-
14.	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	/+?
15	To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+/-

5.57 Significant positive effects are expected in relation to SA objective 1 (Housing) because this policy aims to focus development within the Urban Area of the Borough. Part of the overriding priority for the Borough's spatial strategy is to provide strategic mixed-use development planned within Ebbsfleet Garden

City and central Dartford. The policy states that provision of infrastructure, such as education and health facilities, and the protection of shops and services within District and Local Centres will be ensured. Therefore, significant positive effects are also expected in relation to SA objective 2 (Services and facilities). However, there may be some capacity issues as new housing is provided. Therefore, a minor negative effect is also expected with uncertainty as the aim of the policy is to provide new services alongside other forms of development, which could address capacity issues across the plan area.

5.58 Significant positive effects are expected against SA objective 5 (Economy) because significant jobs, commercial activity and new employment premises will be prioritised within Central Dartford and Ebbsfleet Garden City. The policy states that economic growth within the Borough will be focused on supporting the growth of existing local businesses, encouraging start-ups and smaller enterprises and promoting enhanced productivity.

5.59 The policy aims to improve walking and cycling links, railway stations and the bus/Fastrack networks in addition to the provision or enhancement of the Green Infrastructure network and Green Grid links. Significant positive effects are expected in relation to SA objective 4 (Health and inequality) as improvements to active travel and enhancements to the GI network is likely to benefit the wellbeing of the local communities. However, minor negative effects are also expected in relation to SA objective 4 (Health and inequality) as additional development could lead to capacity issues for local services and facilities.

5.60 Significant positive effects are expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) as improvements to sustainable modes of travel are likely to make the private car less attractive thereby minimising air pollution and greenhouse gas emissions. However, a proportion of trips generated from new development is likely to be made by private vehicles, with negative effects on local air quality and could generate traffic through the London Road AQMA, Dartford Town Centre AQMA and A2 Bean Interchange AQMA, which may exacerbate existing air quality issues. Furthermore, the enhancement of the Rivers Thames and Darent for outdoor recreation could increase the amount of visitors coming from further

afield who are likely to travel by car. As such, minor negative effects are also expected for SA objectives 6 and 12 and significant negative effects for SA objective 10.

5.61 SA objective 3 (Community cohesion) is expected to have minor positive effects as improvements to sustainable modes of travel and green spaces, as well as enhancements to the Rivers Thames and Darent, for outdoor recreation are likely to increase social interaction. In addition, development on brownfield land could help to strengthen the quality of design and legibility of development in places that already form part of the urban fabric, contributing a sense of identity.

5.62 Significant positive effects are expected in relation to SA objective 8 (Soils) because the policy seeks to re-use brownfield land for development. However, a minor negative effect is also expected because a small area in the south of the Ebbsfleet Garden City development area is designated as Grade 2 agricultural land; therefore it is possible that development could result in the loss of the Borough's best and most versatile agricultural land, although this depends on the layout of development, so uncertainty is attached.

5.63 Large parts of the Urban Area and the northern section of Ebbsfleet Garden City lie within Flood Zones 2 and 3. Therefore, significant negative effects are expected against SA objective 11 (Flood risk) in relation to Policy S1, as additional development is likely to increase the amount of impermeable surfaces and thereby increase the risk of flooding within the area. Uncertainty is attached as parts of both areas benefit from flood defences.

5.64 Minor negative effects are expected in relation to SA objectives 7 (Mineral resources) and 9 (Water quality) as there are a number of Mineral Safeguarding Areas (MSAs) and Source Protection Zones (SPZs) 1, 2 and 3 within the Urban Area and Ebbsfleet Garden City. It is likely that development could adversely impact access to finite mineral resources and could contaminate the water environment from construction activities without appropriate mitigation.

5.65 Policy S1 states that designated sites of biodiversity value will be protected and ecological sites and networks will be improved and maximised. In addition, development proposals should provide and enhance Green Infrastructure and Green Grid links and enhance the Rivers Thames and Darent's ecology where possible. Significant positive effects are expected in relation to SA objective 13 (Biodiversity) because these initiatives are likely to provide additional habitats for local wildlife in addition to promoting habitat connectivity. The Urban Area contains patches of priority habitat, deciduous woodland, and coastal and floodplain grazing marsh within the north associated with the Local Wildlife Site Dartford Marshes. Priority habitat, Lowland heath, is also found within Local Wildlife Site Dartford Heath which lies just on the edge of the urban area boundaries to the south west. Furthermore, Ebbsfleet contains and lies in proximity to a number of biodiversity assets, including priority habitats, Ebbsfleet Marches, Northfleet and Alkerden Lane Pit, Swanscombe, both Local Wildlife Sites and the Swanscombe Marine Conservation Zone. All of these natural assets could be affected by development of the Urban Area and Garden City, depending on the nature and location of development. In addition, the Bakers Hole SSSI is a geological asset lying within the Ebbsfleet development, which could be harmed directly or indirectly by development. Therefore, minor negative effects are also expected against SA objective 13 (Biodiversity).

5.66 The Urban Area is almost entirely urbanised while Ebbsfleet Garden City is a mix of historic mineral workings, greenfield and previously developed land. Ebbsfleet also includes attractive areas of green space and water, as well as shrubland and regenerated woodland that might help to buffer existing development from the train line. Therefore, minor negative effects are expected against SA objective 15 (Landscape). However, as Policy S1 also aims to enhance the enhance Green Infrastructure and Green Grid links and the setting of the Rivers Thames and Darent, it is also likely to have minor positive effects. Uncertainty is attached as effects depend on the exact design and layout of development.

5.67 Several sites of Archaeological Significance, Areas of Special Character, Grade II Listed Buildings and Conservation Areas, such as the Dartford Town Conservation Area, lie within the Urban Area of Dartford. In addition, the entirety of the development area of Ebbsfleet lies within a site of Archaeological Significance and the area around the site includes Listed Buildings and Scheduled Monuments, in particular the Palaeolithic sites near Baker's Hole and Neolithic sites near Ebbsfleet. Policy S1 states that heritage assets will be conserved and enhanced, therefore minor positive effects are expected against SA objective 14 (Historic environment). However, development could have an adverse impact on the assets themselves as well as their settings. As such, Policy S1 is also expected to have significant negative effects in relation to SA objective 14 (Historic Environment). Uncertainty is attached because the actual effect will depend on the final design, scale and layout of development.

Table 5.3: SA scores for Policy S2 - Infrastructure PlanningStrategy

SA	objective	S2
1.	To ensure that everyone has the opportunity to live in a decent home.	+/-?
2.	To ensure ready access to essential services and facilities for all residents.	++
3.	To strengthen community cohesion.	+
4.	To improve the population's health and reduce inequalities.	+
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-
7.	To conserve the Borough's mineral resources.	-?
8.	To conserve the Borough's soils.	0
9.	To maintain and improve the quality of the Borough's waters.	-?
SA objective	S2	
---	------	
10. To reduce air pollution and ensure improvements in air quality.	+/-	
11. To avoid and mitigate flood risk.	+/-?	
12. To minimise the Borough's contribution to climate change.	+/ -	
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	+/-?	
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	-?	
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+/-?	

5.68 Policy S2 (Infrastructure Planning Strategy) states that development within the Borough will provide a co-ordinated approach to the delivery of new infrastructure and be located where it is well served by public transport, jobs and services and facilities, which will be within walking distance. Furthermore, all major development must provide improved walking and cycling routes that are integrated within the surrounding area. As such, significant positive effects are expected against SA objectives 2 (Services and facilities) and 6 (Sustainable travel). However, minor negative effects are also expected in relation to SA objective 6 (Sustainable travel), as the highway and junction upgrades supported by the policy could help reduce congestion, they could also make driving a more attractive mode of transport.

5.69 Minor positive effects are expected in relation to SA objectives 4 (Health and inequality) and 5 (Economy) as increasing access to services and facilities, education and jobs through walking and cycling routes is likely to improve the health of the local communities and allow better access to employment opportunities. Minor positive effects are also expected in relation to SA objective

3 (Community cohesion) as community uses will be retained and new facilities will be delivered to provide appropriately located and number of community facilities within the area.

5.70 The delivery of new infrastructure alongside development could have implications in terms of the viability of housing delivery in the plan area. The supporting text notes that the Infrastructure Delivery Plan (IDP) outlines planned projects, responsibility for their delivery, and funding sources. The IDP, along with the Community Infrastructure Levy (CIL) will provide some certainty to developers, which should help manage any viability issues. As such a mixed minor positive and minor negative effect is expected in relation to SA objective 1 (Housing). The effect is uncertain given that the potential for issues of viability to slow housing delivery will be dependent in part of the decision making of developers which is unknown.

5.71 Mixed minor positive and minor negative effects are expected in relation to SA objectives 10 (Air pollution) and 12 (Climate change) as more accessible cycling and walking routes and public transport enhancements are likely to increase the amount of sustainable transport trips thereby minimising air pollution and greenhouse gas emissions. This policy also supports highway and junction upgrades, which could help reduce congestion. However, it is also possible that they could make driving a more attractive mode of transport. In addition, whilst use of the river for transport purposes could reduce congestion on the roads, it would still contribute to greenhouse emissions as most river vessels use heavy fuel oil or diesel.

5.72 As the amount of infrastructure is likely to increase, the amount of impermeable surfaces may also increase, thereby increasing the risk of flooding within the area. Therefore, minor negative effects are expected against SA objective 11 (Flood risk). However, minor positive effects are also expected against this SA objective as the Green Grid network will be upgraded and expanded through the improvement of green infrastructure which could build resilience to flooding. Uncertainty is attached as the effects depend on the location and nature of new infrastructure, which is unknown at this stage.

5.73 As the Green Grid network will be improved to achieve new multifunctional green and blue spaces and biodiversity enhancement, minor positive effects are expected in relation to SA objectives 13 (Biodiversity) and 15 (Landscape). However, minor negative effects are also expected against these SA objectives as additional development could be situated in environmentally sensitive areas. Minor negative effects are also expected in relation to SA objective 14 (Historic environment) for similar reasons. Uncertainty is attached as the actual effects will be dependent upon site layout, design and implementation.

5.74 Minor negative effects are expected in relation to SA objectives 7 (Mineral resources) and 9 (Water quality) as there are a number of Mineral Safeguarding Areas (MSA) and Source Protection Zones (SPZ) across the Borough. As such, it is possible that development of new infrastructure could adversely impact access to finite mineral resources and could contaminate the water environment from construction activities without appropriate mitigation

SA ob	jective	S 3
	o ensure that everyone has the opportunity to live a decent home.	+/-?
	o ensure ready access to essential services and cilities for all residents.	0
3. To	o strengthen community cohesion.	0
	o improve the population's health and reduce equalities.	+
	acilitate a sustainable and growing economy and a tal and viable town centre.	+/-?
SL	o reduce the need to travel and encourage ustainable and active alternatives to motorised whicles to reduce congestion.	+

Table 5.4: SA scores for Policy S3 - Climate Change Strategy

SA objective	S3
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	+
 To maintain and improve the quality of the Borough's waters. 	+
10. To reduce air pollution and ensure improvements in air quality.	+
11. To avoid and mitigate flood risk.	++
12. To minimise the Borough's contribution to climate change.	++
 To conserve, connect and enhance the Borough's wildlife, habitats and species. 	+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.75 Policy S3 (Climate Change Strategy) requires development to be well located, innovatively designed and constructed to mitigate and adapt to the effects of climate change. Development should help to minimise carbon emissions, reduce the need to use unsustainable travel, and increase the Borough's resilience to climate change. As such, significant positive effects are expected in relation to SA objective 12 (Climate change).

5.76 Additionally, in accordance with national policy, the policy states that development will be sequentially located in areas at lower risk of flooding unless the development can demonstrate how specific wider sustainability benefits will be provided. Major developments will also have to provide sustainable drainage systems that benefit surface water flood risk and the green infrastructure

network. Significant positive effects are expected in relation to SA objective 11 (Flood risk).

5.77 This policy states that sustainable and active travel modes must be embedded into developments thereby improving the community's health and wellbeing and minimising air pollution. In addition, the policy states that existing green spaces will be protected and enhanced, which is likely to provide additional health benefits and will help absorb carbon dioxide. As such, minor positive effects are expected in relation to SA objectives 4 (Health and inequality), 6 (Sustainable travel) and 10 (Air pollution). Furthermore, minor positive effects are also expected in relation to SA objectives 13 (Biodiversity) and 15 (Landscape) as habitats and tree coverage will be protected and enhanced and the policy promotes the mitigation hierarchy and required biodiversity net gain.

5.78 The policy states that development is required to efficiently manage and re-use natural resources and waste, including through the use of water efficiency measures. This could include more efficient use of land. Therefore, minor positive effects are expected in relation to SA objectives 8 (Soils) and 9 (Water quality).

5.79 Mixed minor positive and minor negative effects are expected in relation to SA objectives 1 (Housing) and 5 (Economy) because energy efficient design will lead to a reduction in costs and the incorporation of natural shading and open space could enhance visual amenity, attracting people and investment to the area. While technology is developing rapidly, constructing sustainably designed residential and economic development may incur greater upfront costs. However, this is uncertain.

Table 5.5: SA scores for Policy S4 – Borough DevelopmentLevels

SA objective		S4
1. To ensure that everyone h in a decent home.	as the opportunity to live	++
2. To ensure ready access to facilities for all residents.	o essential services and	+
3. To strengthen community	cohesion.	+
4. To improve the population inequalities.	's health and reduce	+
5. Facilitate a sustainable an vital and viable town centr	0 0	++
6. To reduce the need to trav sustainable and active alte vehicles to reduce conges	ernatives to motorised	+
7. To conserve the Borough'	s mineral resources.	-?
8. To conserve the Borough'	s soils.	++/-
9. To maintain and improve t Borough's waters.	he quality of the	-?
10. To reduce air pollution and air quality.	d ensure improvements in	+/-
11. To avoid and mitigate floo	d risk.	-?
12. To minimise the Borough's change.	s contribution to climate	+/-
13. To conserve, connect and wildlife, habitats and spec	•	-?

SA objective	S4
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	-?
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	-?

5.80 Policy S4 (Borough Development Levels) ensures that levels of future development delivery are sufficient to provide for Dartford's assessed housing needs (an average of 790 per annum, equating to 15,800 dwellings over the plan period) and as such, significant positive effects are expected in relation to SA objective 1 (Housing). In addition, the affordable housing need for the Borough is expected to be met through the Local Plan. In addition, as the policy aims to create sustainable and accessible new neighbourhoods with easy access to jobs, homes, transport and services and additional infrastructure is expected to be delivered at a complementary rate of development, minor positive effects are expected in relation to SA objectives 2 (Services and facilities) and 6 (Sustainable travel).

5.81 Minor positive effects are expected in relation to SA objectives 3 (Community cohesion) and 4 (Health and inequality) as large developments are expected to provide services and facilities, which could include health facilities, and would provide a focal point for community life.

5.82 The policy supports the sustainable development of Dartford's regeneration areas and aims to provide a balanced mix of land uses within the Borough, which includes commercial and business. Therefore, this policy could contribute to the amount of employment land within the Borough. Significant positive effects are expected in relation to SA objective 5 (Economy).

5.83 Minor negative uncertain effects are expected in relation to SA objectives 11 (Flood risk), 13 (Biodiversity), 14 (Historic environment) and 15 (Landscape)

because additional development will likely increase the amount of impermeable surfaces within the Borough thereby increasing the risk of flooding, although this could be minimised by the focus on brownfield land. Furthermore, development could harm local biodiversity, heritage assets and the landscape, which is discussed later in this report, in relation to site-specific policies.

5.84 Mixed significant positive and minor negative effects are expected in relation to SA objective 8 (Soils). This policy aims to achieve the Borough's target of 80% of new homes to be developed on brownfield land. However, considering the high number of homes to be delivered and the fact that brownfield land is finite, it is likely that a proportion of homes would have to be located on greenfield land.

5.85 Mixed minor positive and minor negative effects are expected against SA objectives 10 (Air pollution) and 12 (Climate change) as the policy aims to create sustainable and accessible neighbourhoods with easy access to jobs, homes and services. However, additional residents within the area are likely to increase the amount of private cars on the road thereby increasing the amount of air pollution and greenhouse gas emissions.

5.86 Minor negative effects are expected in relation to SA objectives 7 (Mineral resources) and 9 (Water quality) as there are a number of Mineral Safeguarding Areas (MSA) and Source Protection Zones (SPZ) across the Borough. As such, it is likely that development could adversely impact access to the finite mineral resources and could contaminate the water environment, without appropriate mitigation, for example from construction activities.

Central Dartford

Table 5.6: SA scores for Policy D1 - Central Dartford Strategy

SA	objective	D1
1.	To ensure that everyone has the opportunity to live in a decent home.	+
2.	To ensure ready access to essential services and facilities for all residents.	++?
3.	To strengthen community cohesion.	++?
4.	To improve the population's health and reduce inequalities.	++?
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	++
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-
7.	To conserve the Borough's mineral resources.	-?
8.	To conserve the Borough's soils.	+
9.	To maintain and improve the quality of the Borough's waters.	-?
10	To reduce air pollution and ensure improvements in air quality.	++/
11.	To avoid and mitigate flood risk.	?
12	To minimise the Borough's contribution to climate change.	++/-
13	To conserve, connect and enhance the Borough's wildlife, habitats and species.	+/-?

SA objective	D1
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+/-?
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.87 Significant positive effects are expected in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion), 4 (Health and inequality) and 5 (Economy) because this policy supports the development of a range of activities and services in the town centre, including cultural and creative facilities, which will increase the town centre's economic vitality and the range of jobs available. As set out in the vision for central Dartford, the vibrancy of the town centre will be supported by a diversified economy. Primary healthcare facilities are located within walking distance of the town centre, in addition to primary and secondary schools. There are also a number of employment areas just outside of the town centre.

5.88 However, this policy could potentially result in existing services and facilities becoming over-capacity. Therefore, uncertain effects are recorded in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion) and 4 (Health and inequality). The policy promotes the refurbishment of public spaces and opening up the riverside through the creation of safe links and spaces. Indeed, there are already a number of existing open spaces located within and around Central Dartford, such as Dartford Park. Reference is also made to green routes, which will feature public spaces, squares or pocket parks, generating high levels of pedestrian activity and outdoor interaction. Open space provision in general, as well as refurbishment, is expected to encourage more outdoor recreational activity and community integration, with the creation of safe links and spaces expected to have beneficial effects on community cohesion by potentially reducing crime, anti-social behaviour and the fear of crime.

5.89 Significant positive effects are expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because open spaces will be re-purposed and enhanced, alongside improvements to links across central Dartford through the removal of barriers to movement created by large sites. This is likely to encourage more walking and cycling, with the policy also stating that existing routes will be made attractive and safe. Use of public transport will be encouraged by facilitating, and connecting with, an enhanced Dartford railway station/public transport interchange. Dartford town centre already contains a large number of bus stops, and the policy specifically states that public transport capacity will be increased and the council will seek full integration of rail, bus and Fastrack services.

5.90 These measures are expected to reduce dependency on the private car, which will help minimise air pollution. This will have beneficial effects on people's health, contributing to the significant positive effect already recorded in relation to SA objective 4 (Health and inequality). Encouraging more sustainable modes of travel will also help minimise greenhouse gas emissions generated by transport. However, these effects are mixed with adverse effects because the proposed development will introduce more housing to the area, and subsequently more cars. A significant negative effect is expected for SA objective 10 (Air pollution) because it is likely that new residents' private vehicles will exacerbate existing air quality issues within the Dartford Town Centre Air Quality Management Area (AQMA).

5.91 A minor positive effect is expected in relation to SA objective 1 (Housing) because development outlined in the policy is likely to make a contribution to the Borough's overall housing need. For example, the supporting text to this policy makes reference to the repurposing of vacant and under-used buildings to provide a more diverse mix of uses, including residential uses.

5.92 A minor positive effect is expected against this policy in relation to SA objective 8 (Soil). The policy references the redevelopment of the Westgate and Priory Centre sites and repurposing buildings more generally, which is an efficient use of previously developed land.

5.93 A mixed minor positive and minor negative effect is expected in relation to SA objective 14 (Historic environment) because the vision for Central Dartford is to retain a clear sense of its history, with the policy wording encouraging the enhancement of heritage assets. It also makes reference to the sympathetic refurbishment of historic buildings. However, the Dartford Town Centre Conservation Area contains a number of listed buildings, including the Grade I listed Church of the Holy Trinity. A number of Sites of Archaeological Significance are also located within the town centre. Therefore, it is likely that development could result in an adverse effect on these heritage assets and their settings. The negative effect is recorded as uncertain because the actual effect will depend on the final design, scale and layout of the development.

5.94 A minor positive effect is expected for this policy in relation to SA objective 15 (Landscape) because the policy encourages short-term, meanwhile uses of vacant premises, which is expected to help improve Dartford's townscape by reducing the number of vacant units present within the town centre. This will have a positive effect on the character of the town centre and its reputation as a shopping destination.

5.95 A minor positive effect is also expected for this policy in relation to SA objective 13 (Biodiversity). The policy seeks to open up the riverside by upgrading unappealing environments, implementing hard and soft landscaping, including trees for shelter, and enhancing open spaces more generally. Indeed, the River Darent is identified as a Biodiversity Opportunity Area. However, it is possible that opening up the riverside could potentially result in an adverse effect on habitats and species present along the River Darent and downstream through an increase in recreational activity and associated effects, such as littering. Indeed, there are a number of areas of deciduous woodland, all of which are priority habitats, located along the river. Therefore, a minor negative but uncertain effect is also recorded for SA objective 13.

5.96 A significant negative but uncertain effect is expected in relation to SA objective 11 (Flood risk) because much of the town centre falls within Flood Zone 3, as well as Flood Zone 2. Uncertainty has been recorded as the area already benefits from flood defences. It is noted that Policy D2 requires flood

risk to be fully mitigated – this is assessed as part of the assessment of Policy D2.

5.97 A minor negative effect is expected in relation to SA objective 7 (Mineral resources) because two areas towards the south of the town centre overlap a Minerals Safeguarding Area, one of which is on undeveloped land. As such, development could result in an adverse effect on access to finite mineral resources within the Borough. However, the effect is recorded as uncertain because there is a possibility that development could avoid this area or that it would not be viable or appropriate to extract the minerals in this location.

5.98 A minor negative effect is expected in relation to SA objective 9 (Water quality) because the town centre falls partially within Source Protection Zones 1 and 2. Therefore, development could potentially result in the contamination of groundwater. However, the effect is recorded as uncertain because it depends on whether development can avoid these areas or include mitigation measures.

Table 5.7: SA scores for Policy D2 - Central DartfordDevelopment Principles

SA objective		D2
1.	To ensure that everyone has the opportunity to live in a decent home.	++
2.	To ensure ready access to essential services and facilities for all residents.	++
3.	To strengthen community cohesion.	++
4.	To improve the population's health and reduce inequalities.	++
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	++

SA objective	D2
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	0
9. To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvements in air quality.	++
11. To avoid and mitigate flood risk.	++
12. To minimise the Borough's contribution to climate change.	++
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	++
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.99 A significant positive effect is expected in relation to SA objective 1 (Housing) because it supports the creation of a neighbourhood community with a mix of residential types and tenures. Significant positive effects are also expected in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion), 4 (Health and inequality) and 5 (Economy) because this policy supports the town centre's role in providing jobs, retail/leisure services, cultural facilities and other local services. Development proposals are also required by the policy to retain or promote market town features, such as space for independent businesses and arts and cultural industries.

5.100 Significant positive effects are expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because the policy supports the creation of safe, public open space, in addition to pedestrian-friendly streets. The policy specifically states that development proposals should improve air quality and help increase the proportion of journeys made by active and public transport modes. The measures outlined above are expected to reduce use of the private car and minimise associated air pollution. The policy makes specific reference to parking arrangements with flexibility for changing needs and technology, which will further help to minimise air pollution and greenhouse gas emissions. By promoting active transport, this policy is expected to have beneficial effects on people's health, contributing to the significant positive effect already recorded in relation to SA objective 4 (Health and inequality).

5.101 A significant positive effect is expected in relation to SA objective 11 (Flood risk) because, although much of central Dartford falls within Flood Zone 3, the policy requires development proposals to fully mitigate flood risk so as to ensure that development is safe.

5.102 A significant positive effect is expected in relation to SA objective 14 (Historic environment) because Policy D2 requires development proposals to assess the heritage significance of the area and respond positively to local character and history, conserving and taking opportunities to enhance the significance of heritage assets.

5.103 Minor positive effects are expected in relation to SA objectives 13 (Biodiversity) and 15 (Landscape) because the policy requires development proposals to contribute to green infrastructure requirements, whilst also making provision for public open space. The provision of open space is expected to improve the appearance of central Dartford, with green infrastructure expected to increase biodiversity.

5.104 A negligible effect is expected in relation to the remaining SA objectives.

Table 5.8: SA scores for Policy D3 - The Mix of Uses in DartfordTown Centre

SA objective	D3
1. To ensure that everyone has the opportunity to liv in a decent home.	e +
2. To ensure ready access to essential services and facilities for all residents.	++?
3. To strengthen community cohesion.	+
4. To improve the population's health and reduce inequalities.	+
5. Facilitate a sustainable and growing economy and vital and viable town centre.	da ++
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+?/ -
7. To conserve the Borough's mineral resources.	-?
8. To conserve the Borough's soils.	+
9. To maintain and improve the quality of the Borough's waters.	-?
10. To reduce air pollution and ensure improvements air quality.	in/+?
11. To avoid and mitigate flood risk.	?
12. To minimise the Borough's contribution to climate change.	+?/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	° 0

SA objective	D3
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+/-
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.105 Significant positive effects are expected in relation to SA objectives 2 (Services and facilities) and 5 (Economy), because it supports a mix of uses within Dartford town centre. The town centre is also located within walking distance of primary healthcare facilities, in addition to primary and secondary schools. There are a number of employment areas just outside the town centre, which are also expected to directly benefit the economy. The supporting text to the policy provides more detail on services, stating that the aim is to provide a flexible mix of all main town centre uses, with a choice of cafés, restaurants, pubs, offices, hotels, and halls and community uses, including for health and education. Therefore, a greater range of services and facilities is likely to be present within the town centre, providing vibrancy and choice for trader/business and consumer needs. However, this policy could potentially result in existing services and facilities becoming over-capacity. Therefore, uncertainty is added to the effect recorded for SA objective 2 (Services and facilities).

5.106 A minor positive effect is expected in relation to SA objective 1 (Housing) because it sets out that residential development is likely to be delivered at the strategic sites identified in the Local Plan, the conversion or extension of upper floors or under-used buildings, and in other locations demonstrated to be suitable for housing within the town centre.

5.107 A minor positive effect is expected in relation to SA objective 3 (Community cohesion) because the policy supports change of use or redevelopment in the Core Frontage so long as an active frontage is maintained. Active frontages create a vibrant atmosphere, whilst also reducing

levels of crime, anti-social behaviour and fear of crime through 'eyes on the street', which helps strengthen community cohesion. The mix of uses supported by this policy includes community uses, which is expected to have beneficial effects on people's health and wellbeing, in addition to community cohesion. A number of open spaces and primary healthcare facilities are also located within walking distance of Central Dartford. Therefore, a minor positive effect is also expected in relation to SA objective 4 (Health and inequality).

5.108 Minor positive but uncertain effects are expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because although this policy does not directly promote active and sustainable modes of travel, focusing a mix of uses within the town centre, close to where people live, is expected to reduce the need to travel via car to amenities elsewhere. There are a number of bus stops already present within Central Dartford, in addition to Dartford railway station. Reducing people's reliance on the private car is expected to help minimise air pollution. It is also expected to have beneficial effects on people's health, contributing to the minor positive effect already recorded in relation to SA objective 4 (Health and inequality).

5.109 Reducing reliance on the private car is also expected to minimise greenhouse gas emissions generated by transport. However, these effects are mixed with adverse effects because the policy may introduce more housing to the area, and subsequently more cars. A significant negative effect is expected for SA objective 10 (Air pollution) because it is likely that new residents' private vehicles will exacerbate existing air quality issues within the Dartford Town Centre AQMA.

5.110 A minor positive effect is expected in relation to SA objective 8 (Soil) because this policy supports the provision of a mix of uses within the town centre, most of which is already developed. The policy supports change of use or redevelopment in the town centre, with the supporting text emphasising the re-use of land and repurposing of high quality existing buildings for residential uses.

5.111 A mixed minor positive and minor negative effect is expected in relation to SA objective 14 (Historic environment) because the Dartford Town Centre Conservation Area contains a number of listed buildings. A number of Sites of Archaeological Significance are also located within the town centre. However, according to the policy, streets in the town centre should be characterised by a clear sense of history. Specifically, in the Core Frontage, change of use or redevelopment must be consistent with the Conservation Area and other design/heritage principles. The negative effect is recorded as uncertain because the actual effect will depend on the final design, scale and layout of development. A minor positive effect is also expected in relation to SA objective 15 (Landscape) because the policy seeks to deliver a mix of ground floor uses within Dartford town centre, which is expected to have positive effects on the overall townscape.

5.112 A significant negative but uncertain effect is expected in relation to SA objective 11 (Flood risk) because much of the town centre falls within Flood Zone 3, as well as Flood Zone 2. Uncertainty is recorded as the area already benefits from flood defences.

5.113 A minor negative effect is expected in relation to SA objective 9 (Water quality) because the town centre falls within Source Protection Zones 1 and 2. Therefore, development could potentially result in the contamination of groundwater. However, the effect is recorded as uncertain because it depends on whether development can avoid these areas or be suitably mitigated.

5.114 A minor negative effect is expected in relation to SA objective 7 (Mineral resources) because two areas towards the south of the town centre overlap a Minerals Safeguarding Area, one of which is on undeveloped land. As such, development could result in an adverse effect on access to finite mineral resources within the Borough. However, the effect is recorded as uncertain because there is a possibility that development could avoid this area or that it would not be viable or appropriate to extract the minerals in this location.

5.115 A negligible effect is expected in relation to SA objective 13 (Biodiversity) because Central Dartford does not presently contain any designated sites with

regards to biodiversity. However, the area near the River Darent is identified as a Biodiversity Opportunity Area.

Table 5.9: SA scores for Policy D4 - Westgate Allocation

SA objective	e	D4
	ure that everyone has the opportunity to live cent home.	+
	ure ready access to essential services and s for all residents.	++?
3. To stre	ngthen community cohesion.	++?
4. To impline	rove the population's health and reduce lities.	++?
	te a sustainable and growing economy and a d viable town centre.	++
sustain	uce the need to travel and encourage able and active alternatives to motorised s to reduce congestion.	+/-
7. To con	serve the Borough's mineral resources.	0
8. To con	serve the Borough's soils.	++
	ntain and improve the quality of the h's waters.	0
10. To redu air qua	uce air pollution and ensure improvements in lity.	/+
11. To avo	id and mitigate flood risk.	?
12. To mini change	imise the Borough's contribution to climate e.	+/-
	serve, connect and enhance the Borough's , habitats and species.	0

SA objective	D4
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+/-?
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	++

5.116 Significant positive effects are expected in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion), 4 (Health and inequality) and 5 (Economy) because this policy for the development of Westgate seeks to deliver a mix of uses to enhance Dartford's leisure, visitor and mid-evening economy and/or health and wellbeing offer. The development is expected to deliver a cinema and strategic leisure/health facility (or cultural, community service or shopping anchor use of equal significance) and/or a hotel. The allocation is already within walking distance of at least one GP surgery. Additionally, at least 5,000sqm of Class E and C1 uses or other main town centre uses are expected to be delivered.

5.117 In relation to community cohesion, the Westgate development will feature a new public square and is also required to include active uses on existing street frontages, in addition to ensuring safe public and private areas. The allocation is already located within walking distance of open space, in addition to primary schools. It is within walking distance of secondary schools. There are also employment areas just outside of the town centre, within close proximity to this allocation. However, this policy could potentially result in existing services and facilities becoming over-capacity, leading to some uncertainty. There is also some uncertainty as to whether a leisure/health facility, a cultural, community service or shopping anchor, and/or a hotel will be provided. Overall, therefore, uncertainty has been added to SA objectives 2 (Services and facilities), 3 (Community cohesion) and 4 (Health and inequality).

5.118 Significant positive effects are expected in relation to SA objectives 8 (Soil) and 15 (Landscape) because regeneration of the Westgate site will make

efficient use of previously developed land. The site is currently cleared and therefore does not contribute to the town centre, although the original Co-op department store façade remains. Therefore, its development will improve the existing townscape, particularly through provision of a new public square and active frontages.

5.119 A minor positive effect is expected in relation to SA objective 1 (Housing) because the policy makes provision for 100 dwellings. Minor positive effects are also expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because it promotes walking by reconnecting historic roads/routes, to ensure an east-west pedestrian route across the site. Additionally, by providing a range of services and facilities in one place, it is likely to reduce people's reliance on the private car as residents will not have to travel further afield to reach these amenities. There are already a number of bus stops located within walking distance of the site, as well as Dartford railway station. Reducing reliance on the private car is also expected to minimise greenhouse gas emissions generated by transport. However, these effects are mixed with negative effects because the proposed development will introduce more housing to the area, and subsequently more cars. Additional growth could also exacerbate capacity issues on existing railway services. A significant negative effect is expected for SA objective 10 (Air pollution) because it is likely that new residents' private vehicles will exacerbate existing air quality issues within the Dartford Town Centre AQMA.

5.120 A significant negative but uncertain effect is expected in relation to SA objective 11 (Flood risk) because the majority of the site falls within Flood Zone 3 and the remainder falls within Flood Zone 2. However, the entire site lies within an area that benefits from flood defences and consists of previously developed land.

5.121 A mixed minor positive and minor negative uncertain effect is expected in relation to SA objective 14 (Historic environment) because the Dartford Town Centre Conservation Area partially overlaps the site and there are a number of Grade II listed buildings located within 100m of the site. Therefore, development could complement and reinforce the character of the Conservation Area and the settings of nearby listed buildings, if designed appropriately. Alternatively

development could result in an adverse effect on the historic environment, if not well designed. However, the effect is uncertain because the actual effect will depend on the final design, scale and layout of development.

5.122 A negligible effect is expected in relation to SA objectives 7 (Mineral resources), 9 (Water quality) and 13 (Biodiversity) because the Westgate allocation does not fall within a Source Protection Zone or a Minerals Safeguarding Area or contain any designated sites with regards to biodiversity.

Table 5.10: SA scores for Policy D5 - East of Lowfield StreetAllocation

SA	objective	D5
1.	To ensure that everyone has the opportunity to live in a decent home.	++
2.	To ensure ready access to essential services and facilities for all residents.	++?
3.	To strengthen community cohesion.	++?
4.	To improve the population's health and reduce inequalities.	+?
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+/-
7.	To conserve the Borough's mineral resources.	0?
8.	To conserve the Borough's soils.	+
9.	To maintain and improve the quality of the Borough's waters.	-?

SA objective	D5
10. To reduce air pollution and ensure improvements in air quality.	++/
11. To avoid and mitigate flood risk.	
12. To minimise the Borough's contribution to climate change.	+/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+/-?
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	++

5.123 A significant positive effect is expected in relation to SA objective 1 (Housing) because it makes provision for 700 high quality dwellings. Significant positive effects are also expected in relation to SA objectives 2 (Services and facilities) and 3 (Community cohesion) because it seeks to provide 1,500sqm of retail/leisure units to the north of the site and new community use premises to the south of the site. The site is located within walking distance of both a primary school and a secondary school. The site is also located within close proximity of open spaces. The southern edge of the site overlaps an open space, which could potentially be lost as a result of development. Therefore, uncertainty is added to the positive effect for SA objectives 2 (Services and facilities) and 3 (Community cohesion). The policy could also result in existing services and facilities becoming over-capacity, contributing towards this uncertain effect.

5.124 A significant positive effect is expected in relation to SA objective 15 (Landscape) because the East of Lowfield Street site is currently disused, after being previously cleared for retail development that did not materialise.

Therefore, it is expected that development of this site will enhance the landscape, whilst also providing a clear and appealing sense of entry to the town centre. Development proposals are also expected to enhance the public realm and provide active ground floor uses, which will have beneficial effects on the townscape.

5.125 Minor positive effects are expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because the policy seeks to enhance routes for pedestrians and cyclists, in addition to improving the existing pedestrian environment along Lowfield Street. This is expected to make walking and cycling more attractive to members of the public, reducing reliance on the private car. Additionally, there is already a number of bus stops within walking distance of the allocation, in addition to Dartford railway station, making public transport use easily accessible. Focusing a mix of uses within close proximity to where people live is also expected to reduce the need to travel via car to amenities elsewhere. For these reasons, it is likely this policy will help minimise air pollution, whilst also having beneficial effects on people's health. Reducing reliance on the private car is also expected to minimise greenhouse gas emissions generated by transport. However, these effects are mixed with adverse effects because the proposed development will introduce more housing to the area, and subsequently more cars. Additional growth could also exacerbate capacity issues on existing railway services. A significant negative effect is recorded for SA objective 10 (Air pollution) because it is likely that new residents' private vehicles will exacerbate existing air quality issues within the Dartford Town Centre AQMA.

5.126 Minor positive effects are expected in relation to SA objectives 4 (Health and inequality) and 5 (Economy) because this policy promotes a healthy lifestyle by encouraging walking and cycling, in addition to making provision for new community premises. The site is also located within walking distance of GP surgeries. Open spaces are easily accessible from the site, which lies directly adjacent to Dartford Park. However, this policy could potentially result in existing healthcare facilities becoming over-capacity, resulting in some uncertainty against this effect. With regard to the economy, delivering an attractive residential-led mixed use development is expected to attract more people to the area, particularly because there will be a choice of jobs available.

There are also some employment areas located outside of Central Dartford, within close proximity to the allocation.

5.127 A minor positive effect is expected in relation to SA objective 8 (Soil) because part of the site falls on previously developed land and therefore its development will be an efficient use of land.

5.128 A mixed minor positive and minor negative effect is expected in relation to SA objective 14 (Historic environment) because Dartford Town Centre Conservation Area, which partially overlaps the site, contains a number of listed buildings. There are a number of Grade II listed buildings located within 100m of the site, in addition to the Grade II* listed Royal Victoria and Bull Inn and 45 High Street. However, the policy requires proposals to respect the Listed Buildings and Conservation Area located adjacent to the site. The negative effect is recorded as uncertain because the actual effect will depend on the final design, scale and layout of development.

5.129 Significant negative effects are expected in relation to SA objectives 9 (Water quality) and 11 (Flood risk) because the site falls partially within Source Protection Zone 1, with a small proportion of land within Source Protection Zone 2. Therefore, development could potentially result in the contamination of groundwater. However, the effect is recorded as uncertain because it depends on whether development can avoid these areas or suitable mitigation incorporated. A large proportion of the site falls within Flood Zone 3, whilst the remainder of the site falls within Flood Zone 2, with the area not currently benefitting from flood defences.

5.130 A negligible but uncertain effect is expected in relation to SA objective 7 (Mineral resources) because although the southern end of the site falls within a Minerals Safeguarding Area, the land is previously developed and unlikely to be available for extraction.

5.131 A negligible effect is expected in relation to SA objective 13 (Biodiversity) because the allocation does not presently contain any designated sites with

regards to biodiversity. However, the area near the River Darent to the east of the site is identified as a Biodiversity Opportunity Area.

Table 5.11: SA scores for Policy D6 - Priory Centre RoadAllocation

SA objective	D6
1. To ensure that everyone has the opportunity to liv in a decent home.	e ++
2. To ensure ready access to essential services and facilities for all residents.	++?
3. To strengthen community cohesion.	+?
4. To improve the population's health and reduce inequalities.	+?
5. Facilitate a sustainable and growing economy and vital and viable town centre.	a ++
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+/-
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	++
9. To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvements air quality.	in/+
11. To avoid and mitigate flood risk.	?
12. To minimise the Borough's contribution to climate change.	+/-

SA objective	D6
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	++

5.132 Significant positive effects are expected in relation to SA objectives 2 (Services and facilities) and 5 (Economy) because this policy seeks to provide a genuine mix of town centre and other uses for the Priory Road Allocation, including retail, leisure and office premises, in addition to a hotel and/or a 4,000sqm or more town centre attraction, which will help boost the visitor economy. The site is also located within walking distance of primary and secondary schools, with employment areas located to the north west of the town centre. Open spaces are also located within close proximity of the site. However, this policy could potentially result in existing services and facilities becoming over-capacity. Therefore, uncertainty is added to the effect for SA objective 2 (Services and facilities).

5.133 A significant positive effect is expected for Policy D6 in relation to SA objective 1 (Housing) because it makes provision for 400 dwellings.

5.134 A significant positive effect is recorded for Policy D6 in relation to SA objectives 8 (Soil) and 15 (Landscape) because the redevelopment will make efficient use of previously developed land. As set out in the supporting text to this policy, the allocation contains a vacant site fronting Spital Street that currently has a negative impact on the character and vitality of the area. Therefore, its redevelopment will improve the existing landscape and townscape, particularly through improvements to the public realm and the creation of well landscapes public spaces.

5.135 Minor positive effects are expected in relation to SA objectives 3 (Community cohesion), 4 (Health and inequality), 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because the policy supports the creation of new open streets, public spaces and attractive pedestrian linkages, all of which should be safe and overlooked. This is likely to encourage more walking and therefore a healthier lifestyle. The site is also located within walking distance of GP surgeries. However, this policy could potentially result in community and healthcare services becoming over-capacity, leading to some uncertainty for SA objectives 3 (Community cohesion) and 4 (Health and inequality). With regard to wellbeing, the policy requires that development must not have any adverse effects on the residential amenity of neighbouring houses.

5.136 Focusing a mix of uses all in one area is also expected to reduce people's reliance on the private car as they will not have to travel further afield to reach these amenities. The site is already located within close proximity of a number of bus stops and Dartford railway station. Reducing reliance on the private car is expected to minimise greenhouse gas emissions generated by transport. However, the effects in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change), are mixed with adverse effects because the proposed development will introduce more housing to the area, and subsequently more cars. Additional growth could also exacerbate capacity issues on existing railway services. A significant negative effect is expected for SA objective 10 (Air pollution) because it is likely that new residents' private vehicles will exacerbate existing air quality issues within the Dartford Town Centre AQMA.

5.137 A minor positive effect is expected in relation to SA objective 14 (Historic environment) because it requires development proposals to complement adjacent listed buildings and enhance the Conservation Area. A small number of Grade II listed buildings are located within 100m of the site, in addition to the Grade II* listed Royal Victoria and Bull Inn.

5.138 A significant negative effect is expected in relation to SA objective 11 (Flood risk) because a large proportion of the site falls within Flood Zone 3, whilst the remainder falls within Flood Zone 2. Uncertainty is recorded as the area already benefits from flood defences.

5.139 A negligible effect is expected in relation to SA objectives 7 (Mineral resources), 9 (Water quality) and 13 (Biodiversity) because the Priory Centre Road allocation does not fall within a Source Protection Zone or a Minerals Safeguarding Area or contain any designated sites with regards to biodiversity.

Table 5.12: SA scores for Policy D7 - Station Surrounds/River Darent

SA objective		D7
1.	. To ensure that everyone has the opportunity to live in a decent home.	
2.	To ensure ready access to essential services and facilities for all residents.	+?
3.	To strengthen community cohesion.	++?
4.	 To improve the population's health and reduce inequalities. 	
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-
7.	To conserve the Borough's mineral resources.	0?
8.	To conserve the Borough's soils.	++
9.	To maintain and improve the quality of the Borough's waters.	-?
10	To reduce air pollution and ensure improvements in air quality.	++/
11	. To avoid and mitigate flood risk.	?/+

SA objective	D7
12. To minimise the Borough's contribution to climate change.	++/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	/+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+/-?
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	++

5.140 Significant positive effects are expected for the allocation of Station Surrounds/River Darent in relation to SA objectives 3 (Community cohesion) and 4 (Health and inequality) because the policy supports a mix of uses, with specific reference made to community facilities. However, the policy could potentially result in existing community and healthcare services becoming overcapacity, leading to some uncertainty against these objectives. Emphasis is also placed on the creation of new landscaped public spaces along the riverside, in addition to pocket parks and other greenspaces with clear walkable routes to existing open spaces. These measures are expected to make walking a more attractive mode of travel, which may encourage people to lead healthier lifestyles. Indeed, the area is currently located within close proximity to a number of open spaces. The area is also located within walking distance of GP surgeries, in addition to primary schools. The area is located within walking distance of secondary schools (including grammar schools and single-sex schools).

5.141 Significant positive effects are expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because the area is expected to deliver high quality pedestrian routes along the river, which will make walking a more attractive mode of travel. Improvements may also be made to Dartford railway station or access to it, with opportunities for beneficial

station relocation and/or new railway tracks or infrastructure for additional services fully explored, in addition to Fastrack/bus services. There are also a number of bus stops located within the area. Contributions to new or improved pedestrian/cycle routes across the ring road and across the railway line/access to Dartford railway station, will also be required. The area is highly accessible and encouraging more active transport and use of public transport, is expected to reduce reliance on the private car, which will minimise air pollution. It is also expected to have beneficial effects on people's health, contributing to the significant positive effect already recorded in relation to SA objective 4 (Health and inequality).

5.142 Reducing reliance on the private car is expected to minimise greenhouse gas emissions generated by transport. However, the effects for SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) are mixed with negative effects because the proposed development will introduce more housing to the area, and subsequently more cars. Additional growth could also exacerbate capacity issues on existing railway services. A significant negative effect is expected for SA objective 10 (Air pollution) because the area partially overlaps the Dartford Town Centre AQMA and it is likely that new residents' private vehicles will exacerbate existing air quality issues within the AQMA.

5.143 Significant positive effects are expected in relation to SA objectives 8 (Soil) and 15 (Landscape) because the area comprises brownfield land. With regard to landscape, the policy seeks to transform the riverside environment into an attractive place with new landscaped public spaces. Additionally, development proposals must be well and sensitively designed, reflecting the town's character and heritage. For this reason, a minor positive effect is expected in relation to SA objective 14 (Historic environment). However, this is mixed with a minor negative effect because the area contains one Grade II listed building (151 and 151A Hythe Street) and is located directly adjacent to the Dartford Town Centre Conservation Area, which contains a number of listed buildings.

5.144 A minor positive but uncertain effect is expected in relation to SA objective 1 (Housing) because development of the allocation could potentially create new neighbourhoods. The policy specifically makes reference to the

delivery of alternative forms and tenures of new housing, additional to residential development already under construction or recently completed.

5.145 Minor positive effects are expected in relation to SA objectives 2 (Services and facilities) and 5 (Economy) because the policy encourages provision of commercial facilities, community facilities and serviced offices, in addition to uses that will complement cultural and leisure uses at the Orchard Theatre and the Westgate strategic allocation. As mentioned previously, the area is located within walking distance of GP surgeries, in addition to primary schools. Additionally, the area is located within walking distance of secondary schools. However, this policy could potentially result in existing services and facilities becoming over-capacity, leading to some uncertainty for SA objective 2 (Services and facilities). Despite this, providing a mix of uses will have a direct positive effect on the economy by attracting more people to the area and providing employment opportunities. There are also two employment areas located directly adjacent to this area.

5.146 A mixed significant negative and minor positive effect is expected in relation to SA objective 13 (Biodiversity) because the area partially overlaps an area of coastal saltmarsh, which is a priority habitat. However, naturalising the River Darent will bring ecological benefits to the area.

5.147 A mixed significant negative and minor positive effect is expected in relation to SA objective 11 (Flood risk) because a large proportion of land in this area falls within Flood Zone 3 and Flood Zone 2 and may therefore require further mitigation against flood risk. However, the policy also seeks to naturalise the River Darent and its banks, reducing flood risk and bringing ecological benefits. Uncertainty is recorded as the area already benefits from flood defences.

5.148 A minor negative effect is expected in relation to SA objective 9 (Water quality) because there is an area to the south east of the station that falls within Source Protection Zone 1. Therefore, development could potentially result in groundwater contamination. The effect is recorded as uncertain because there

is possibility that development could avoid this area or incorporate suitable mitigation.

5.149 A negligible but uncertain effect is expected in relation to SA objective 7 (Mineral resources) because although there are Minerals Safeguarding Areas in the northern part of this area, the land is previously developed and therefore minerals are unlikely to be available for extraction.

Ebbsfleet and Swanscombe Area

Table 5.13: SA Scores for Policy E1 - Ebbsfleet Garden CityStrategy and Policy E2 - Ebbsfleet Garden City DevelopmentPrinciples

SA	objective	E1	E2
1.	To ensure that everyone has the opportunity to live in a decent home.	++	+
2.	To ensure ready access to essential services and facilities for all residents.	++	+
3.	To strengthen community cohesion.	++	+
4.	To improve the population's health and reduce inequalities.	++	+
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	++	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-	+
7.	To conserve the Borough's mineral resources.	-?	0

SA objective	E1	E2
8. To conserve the Borough's soils.	++/-?	0
9. To maintain and improve the quality of the Borough's waters.	-	0
10. To reduce air pollution and ensure improvements in air quality.	++/	+
11. To avoid and mitigate flood risk.	?	0
12. To minimise the Borough's contribution to climate change.	++/-	+
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	++/?	+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	?	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+/-	+

5.150 A significant positive effect is expected against SA objective 1 (Housing) as Policy E1 supports the creation of a Garden City at Ebbsfleet which is expected to provide 9,300 new homes within Dartford Borough. A minor positive effect is expected for Policy E2 for this SA objective as it seeks to achieve a variety of types and tenures of homes across all neighbourhoods.

5.151 Significant positive effects are expected against Policy E1 in relation to SA objective 5 (Economy) because the policy supports the provision of high-quality infrastructure, homes and business investment. In addition, Policy E1 encourages an enterprising and inclusive local economy through the support of local businesses and provision of additional and accessible local employment opportunities. Policy E2 is also expected to have positive effects, but these are

expected to be less significant as this policy does not propose any development but rather seeks to shape any development coming forward.

5.152 Policy E1 states that there must be a coordinated delivery of welldesigned and well-served mixed neighbourhoods and achieve a healthy new town. These neighbourhoods will include employment opportunities, schools, health facilities and centres. These facilities will also include recreational and cultural facilities which will be in walkable, vibrant and sociable neighbourhoods. Finally, connections to walking and cycling paths and public transport hubs will be encouraged through Policy E1 and E2. These factors will result in likely significant positive effects for Policy E1 for SA objectives 2 (Services and facilities), 3 (Community cohesion), 4 (Health and inequality). Policy E2 is also expected to have positive effects, but for the same reasons outlined above, these are expected to be less intensified.

5.153 Significant positive effects are also expected in relation to Policy E1 for SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because development in Ebbsfleet Garden City will achieve an integrated and accessible transport system with walking, cycling and public transport designed in an attractive manner. This is expected to reduce reliance on the private car, minimising air pollution and greenhouse gas emissions. In addition, Policy E1 states that the Council aims to use the opportunity of the new Garden City to aim for zero-carbon and energy-positive technology. However, these effects are mixed with minor negative effects for SA objectives 6 and 12, because it is likely that this large-scale development would result in a substantial increase in the use of the private car overall, particularly for those wanting to travel to places other than those served by the bus and train routes. The significant positive effects are mixed with significant negative effects for SA objective 10, as additional growth could also exacerbate capacity issues on existing railway services and generate traffic through the London Road AQMA and A2 Bean Interchange AQMA, which may exacerbate existing air quality issues. In addition, part 1 of Policy E1 looks to make the Garden City 'an important destination for recreation and leisure uses', which could attract people from further afield to the area, who may be more likely to drive.
5.154 Policy E2 is also expected to have positive effects on SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change), as it seeks to enhance walking/cycling connections but these are expected to be less significant as this policy does not propose any development but rather seeks to shape any development coming forward.

5.155 Policy E2 states that development proposals should deliver open space and contribute to the Green Grid with a strong network of green corridors and waterscapes to create a sense of place within Ebbsfleet. In addition, Policy E1 promotes the provision of new parkland and strategic open space as well as the delivery and management of an estuarine ecological park on Swanscombe Peninsula. As such, significant positive effects are expected in relation to SA objective 13 (Biodiversity) for Policy E1 and minor positive effects are expected for Policy E2, because these initiatives are likely to provide additional habitats for local wildlife in addition to promoting habitat connectivity. The area contains and lies in proximity to a number of biodiversity assets, including priority habitats, Ebbsfleet Marches, Northfleet and Alkerden Lane Pit, Swanscombe, both Local Wildlife Sites and the Swanscombe Marine Conservation Zone, which could be affected by development of the Garden City, depending on the nature and location of development. In addition, the Bakers Hole SSSI is a geological asset lying within the Ebbsfleet development, which could be harmed directly or indirectly by development. Therefore, significant negative effects are also expected against Policy E1 for SA objective 13 (Biodiversity). The effect is uncertain, as it depends on the design and layout of development, including any mitigation provided.

5.156 Parts of the area are fairly urbanised, such as parts of Ebbsfleet Central, which contains Ebbsfleet International Station, the train line and associated car parks. However, it also includes attractive areas of green space and water, as well as shrubland and regenerated woodland that might help to buffer existing development from the train line. The 'parkway' type landscape and approach to the station are also positive features. Therefore, minor negative effects are effects against SA objective 15 (Landscape) in relation to Policy E1. Policy E2 states that homes should be 'beautifully and imaginatively designed', which is expected to contribute to ensuring development is attractive in its own right. Overall, both policies aim to create attractive neighbourhoods, enhance the

public realm and contribute to the open space provision and Green Grid of the Borough, so, minor positive effects are also expected.

5.157 Mixed significant positive and minor negative effects are also expected in relation to SA objective 8 (Soils) as Policy E1 aims to support the use of empty buildings which would reduce the amount of greenfield land developed upon. However, a small area in the south of the area is designated as Grade 2 agricultural land; therefore, it is possible that development could result in the loss of the Borough's Best and Most Versatile Agricultural Land, although this depends on the layout of development.

5.158 There is a small portion of the area within Flood Zones 2 and 3 at the site of Ebbsfleet Central, and substantial areas at risk of flooding on the Swanscombe peninsula. Therefore, significant negative effects are expected against SA objective 11 (Flood risk) in relation to Policy E1 as additional development is likely to increase the amount of impermeable surfaces and thereby increase the risk of flooding within the area. Uncertainty is attached as the area benefits from flood defences.

5.159 Minor negative effects are expected against SA objective 7 (Mineral resources) for Policy E1 because small parts of the Garden City site fall within Minerals Safeguarding Areas (MSA). As such, there is potential for development to result in an adverse effect on access to finite mineral resources. However, this is uncertain as there is a possibility that development could avoid this area or that it would not be viable or appropriate to extract the minerals in this location.

5.160 Minor negative effects are expected in relation to SA objective 9 (Water quality) for Policy E1 because the site falls within Source Protection Zones (SPZs) 1, 2 and 3, therefore there is potential for development to adversely affect water quality.

5.161 The entirety of the development area of Ebbsfleet lies within a site of Archaeological Significance and the area around the site includes Listed Buildings and Scheduled Monuments, in particular the Palaeolithic sites near

Baker's Hole and Neolithic sites near Ebbsfleet and lie within Ebbsfleet Central strategic site. As such, Policy E1 is expected to have significant negative effects in relation to SA objective 14 (Historic Environment). Uncertainty is attached because the actual effect will depend on the final design, scale and layout of development.

Table 5.14: SA scores for Policy E3 - Swanscombe

SA objective	E3
1. To ensure that everyone has the opportunity to live in a decent home.	+
2. To ensure ready access to essential services and facilities for all residents.	+
3. To strengthen community cohesion.	+
4. To improve the population's health and reduce inequalities.	+
5. Facilitate a sustainable and growing economy and a vital and viable town centre.	a 0
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	+
9. To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvements in air quality.	۱ +
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	+

SA objective	E3
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.162 Minor positive effects are expected from Policy E3 in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because development in Ebbsfleet Garden City should, wherever possible, ensure that Swanscombe benefits from access to better facilities and public transport, including upgrades to or a wholly new railway station. Improvements will also be made to existing connections and the delivery of new green walking/cycling connections, particularly towards the River Thames and Ebbsfleet International Station. This is expected to reduce reliance on the private car, minimising air pollution. Encouraging more walking and cycling is also expected to encourage healthier, more active lifestyles, contributing to the minor positive effect recorded for SA objective 4 (Health and inequality). A reduced reliance on the private car will also help minimise greenhouse gas emissions associated with the car.

5.163 A minor positive effect is expected in relation to SA objectives 1 (Housing) and 8 (Soil). As set out in the supporting text to Policy E3, just under 100 new homes will be delivered on disused and underused brownfield sites, making efficient use of previously developed land. Minor positive effects are also expected in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion) and 4 (Health and inequality) because facilities such as schools and healthcare provision at the High Street District Centre, and other focal clusters and locations within Swanscombe, should be retained and improved. This will ensure continued cohesion and sense of community in the

town. The policy states that there may also be opportunities to provide additional housing and local services.

5.164 A minor positive effect is expected in relation to SA objective 15 (Landscape) because the policy seeks to retain and improve the identity of Swanscombe. This will ensure that its identity is not 'lost' as a result of Ebbsfleet Garden City.

Table 5.15: SA scores for Policy E4 - Ebbsfleet CentralAllocation

SA objective	E4
1. To ensure that everyone has the opportunity to live in a decent home.	++
2. To ensure ready access to essential services and facilities for all residents.	++?
3. To strengthen community cohesion.	++?
4. To improve the population's health and reduce inequalities.	++?
5. Facilitate a sustainable and growing economy and vital and viable town centre.	a ++/-
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-
7. To conserve the Borough's mineral resources.	-?
8. To conserve the Borough's soils.	?/+
9. To maintain and improve the quality of the Borough's waters.	-?
10. To reduce air pollution and ensure improvements i air quality.	in ++/

SA objective	E4
11. To avoid and mitigate flood risk.	?
12. To minimise the Borough's contribution to climate change.	++/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	?/+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	?
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	++/-?

5.165 A significant positive effect is expected in relation to SA objective 1 (Housing) because it makes provision for approximately 2,000 residential units. Significant positive effects are also expected in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion), 4 (Health and inequality) and 5 (Economy) because it seeks to provide 100,000sqm of a full mix of activities, including employment, health/education, retail/leisure and community infrastructure, in addition to major new transport infrastructure. This will be supported by new open and public spaces. Indeed, at least 30% of the site will be provided as open space, including a new park along the River Ebbsfleet. The site is located within walking distance of a GP surgery and a primary school. Open spaces are located within close proximity to the site.

5.166 Elsewhere in the site, development will include new Local Centres to support the new residential neighbourhoods. However, these will need to be delivered early on to support new residential development, resulting in some uncertainty for SA objectives 2 (Services and facilities), 3 (Community cohesion) and 4 (Health and inequality). The factors outlined above will directly benefit the economy, whilst also attracting more people and businesses to the area. Additionally, two employment areas are located to the north of the site. However, the creation of this major commercial hub, which would become the

'beating heart' of Ebbsfleet, may lead to competition with Dartford town centre, potentially affecting its vitality and viability. As such, a minor negative effect is also expected in relation to SA objective 5 (Economy).

5.167 Significant positive effects are expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because it proposes major new transport infrastructure in the form of a new public transport hub between rail services at Ebbsfleet International and other local rail stations, in addition to Fastrack and local buses. A number of bus stops are located within and around the site. The policy also seeks to deliver major new walking and cycling connections to existing and new communities. These measures are expected to significantly reduce reliance on the private car, encouraging use of more active and sustainable transport modes. As such, air pollution is likely to be minimised. These requirements are also likely to promote more active and healthier lifestyles, at the same time as reducing greenhouse gas emissions associated with car use. However, the effects against these objectives are mixed with adverse effects because the proposed development will introduce more housing to the area, and consequently more cars. Additional growth could also exacerbate capacity issues on existing railway services. A significant negative effect is expected for SA objective 10 (Air pollution) because the site is located within close proximity to the London Road AQMA and it is likely that new residents' private vehicles will exacerbate existing air quality issues within the AQMA.

5.168 Mixed significant negative and minor positive but uncertain effects are expected in relation to SA objectives 8 (Soil) and 13 (Biodiversity) because although most of the site is classed as urban land in the agricultural land classification, there is a small area in the south of the site that is classed as Grade 2 agricultural land. Therefore, it is possible that development could result in the loss of Dartford's best and most versatile agricultural land, although this is unknown. Additionally, although part of the development will make efficient use of previously developed land, development will also take place on land that has not been previously developed. With regard to biodiversity and geodiversity, the Bakers Hole SSSI is located in the north of the site, whilst the eastern edge of the site overlaps a locally designated wildlife site. The site also contains some areas of priority habitats (deciduous woodland and reedbeds) and is identified

as a Biodiversity Opportunity Area. However, the area in which the SSSI is located will form a landmark urban park, whilst one of the areas of deciduous woodland will form another major park. Indeed, at least 30% of the site will be provided as an open space, which includes the new park along the river. It is expected that these open spaces will increase biodiversity in the area, although this is uncertain because recreational use of the spaces may also cause some damage to habitats.

5.169 A significant negative effect is expected in relation to SA objective 11 (Flood risk) because the site partially falls within Flood Zones 2 and 3. Uncertainty is recorded as these areas benefit from flood defences.

5.170 A significant negative but uncertain effect is expected in relation to SA objective 14 (Historic environment) because the area around Ebbsfleet International Station contains a number of areas of archaeological potential and scheduled monuments, as well as a small number of listed buildings around the edge of the site. Therefore, the scale of development proposed by this policy may result in a significant negative but uncertain effect on this SA objective.

5.171 A mixed significant positive and minor negative effect is expected in relation to SA objective 15 (Landscape) because, the policy requires a large part of the site to consist of open space, including a strategic, landmark urban park, which is expected to improve the character of the area. However, this policy proposes a significant amount of development that may result in adverse effects on the character of the area and its landscape. The effect is recorded as uncertain because the actual effect will depend on the final design, scale and layout of development.

5.172 A minor negative effect is expected in relation to SA objective 7 (Mineral resources) because the site partially overlaps a Minerals Safeguarding Area. Therefore, development could have an adverse effect on access to finite mineral resources within the Borough. The effect has been recorded as uncertain because development may be able to avoid the areas that overlap the Minerals Safeguarding Area or it may not be viable or appropriate to extract the minerals in this location.

5.173 A minor negative effect is expected in relation to SA objective 9 (Water quality) because the site falls within Source Protection Zones 1, 2 and 3. Therefore, development could potentially result in the contamination of groundwater.

Table 5.16: SA scores for Policy E5 - Ebbsfleet South and WestArea

SA	objective	E5
1.	To ensure that everyone has the opportunity to live in a decent home.	+
2.	To ensure ready access to essential services and facilities for all residents.	++?
3.	To strengthen community cohesion.	++
4.	To improve the population's health and reduce inequalities.	++?
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	/+
9.	To maintain and improve the quality of the Borough's waters.	-
10	To reduce air pollution and ensure improvements in air quality.	++/
11	. To avoid and mitigate flood risk.	0

SA objective	E5
12. To minimise the Borough's contribution to climate change.	++/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	/+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	?
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+/-?

5.174 Mixed significant positive uncertain effects are expected for Policy E5 in relation to SA objectives 2 (Services and facilities) and 4 (Health and inequality) because mixed use centres will be provided within the planned residential neighbourhoods, ensuring that people are located within close proximity to the amenities they require. The District Centre proposed at Alkerden will include an education campus and medical/healthcare provision, which will ensure people have easy access to education and healthcare. However, these will need to be delivered early on to support new residential development, resulting in some uncertainty against these SA objectives (2 and 4). The site is already located within walking distance of a GP surgery and primary schools and a secondary school.

5.175 A significant positive effect is expected in relation to SA objective 3 (Community cohesion) because the local and district centres within the planned residential neighbourhoods form a focal point for the community, and potential spaces for local meetings and events to be held. Additionally, a Major Urban Park is to be provided between Alkerden and Ashmere, and the Whitecliffe Lakes Major Park. The urban park is expected to generate high levels of pedestrian activity and outdoor interaction, which will have beneficial effects on community cohesion.

5.176 Mixed significant positive and minor negative effects are expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) because the policy includes a direct Fastrack route through to Bluewater/Ebbsfleet Central, which will serve the facilities of, and act as a focal point for, all of the planned neighbourhoods.

5.177 Additionally, provision is made for a fully connected pedestrian and cycle network which links to surrounding areas and Bluewater, in addition to enhancing connections to Swanscombe, Greenhithe, Stone and the countryside to the south of the A2. A number of bus stops are already located within walking distance of the site, whilst Swanscombe railway station is located within walking distance of the site. The requirements outlined above are expected to reduce reliance on the private car, encouraging use of more active and sustainable transport modes. These measures will also help minimise air pollution and greenhouse gas emissions associated with adverse effects because the proposed development will introduce a substantial amount of housing, and consequently more car use overall. Additional growth could also generate traffic through the London Road AQMA and A2 Bean Interchange AQMA, which may exacerbate existing air quality issues.

5.178 A minor positive effect is expected in relation to SA objectives 1 (Housing) and 5 (Economy) because the policy seeks to deliver planned residential neighbourhoods, which already have planning permission. According to Policy E5, the provision of custom/self-build dwellings will make a substantial contribution to the needs identified on the Dartford Self Build Register. The delivery of housing will attract people to the area, which is likely to have positive effects on the economy as many of these are likely to be seeking or undertaking employment nearby. It is also likely that some employment opportunities will be provided at the education campus and medical/healthcare facility proposed at Alkerden.

5.179 A mixed minor positive and significant negative effect is expected for Policy E5 in relation to SA objective 8 (Soil) because, although the site mainly comprises land in non-agricultural use, Grade 2 agricultural land is present within the site, which is considered best and most versatile agricultural land.

According to the plan, some development will take place on this land. However, the site partly consists of previously developed land, particularly at the Northfleet West Sub Station, resulting in the minor positive effect.

5.180 A significant negative effect is expected in relation to SA objective 14 (Historic environment) because it is located directly adjacent to the Grade II listed Swanscombe Cutting Footbridge, and within close proximity of the Grade I listed Parish Church of St Peter and St Paul. Some Grade II listed buildings are also located close by. A number of Scheduled Monuments are located within close proximity of the site, whilst Sites of Archaeological Significance are present within the site. Therefore, development could potentially result in adverse effects on these heritage assets and their settings. The effect is recorded as uncertain because the actual effect will depend on the final design, scale and layout of development.

5.181 A minor negative effect is also expected in relation to SA objective 9 (Water quality) because the site falls within Source Protection Zones 1, 2 and 3. Therefore, development could potentially result in groundwater contamination.

5.182 A mixed significant negative and minor positive effect is expected in relation to SA objective 13 (Biodiversity) because the site contains a number of areas of deciduous woodland, which is a priority habitat, and slightly overlaps the Alkerden Lane Pit Local Wildlife Site to the north of the site. However, this locally designated wildlife site will not be lost to development as it forms the proposed Whitecliffe Lakes Major Park. Additionally, the policy makes provision for north-south ecological corridors, and the enhancement of Craylands Gorge as an ecological (and heritage) asset. The Major Urban Park proposed between Alkerden and Ashmere, and Whitecliffe Lakes Major Park will help contribute to biodiversity but could also potentially result in an adverse effect on habitats and species through an increase in recreational activity in these areas. A large area of the site is identified as a Biodiversity Opportunity Area.

5.183 A mixed minor positive and minor negative uncertain effect is expected in relation to SA objective 15 (Landscape) because the policy states that the Ebbsfleet Development Corporation will explore opportunities for landscape

enhancements on-site. Due to the fact these landscape enhancements have not yet been outlined, uncertainty is added against this effect. A minor negative effect is expected because the scale of development planned at this site is expected to alter the landscape, although this is also uncertain as this could be either positive or negative change.

5.184 Negligible effects are expected for Policy E5 in relation to SA objectives 7 (Mineral resources) and 11 (Flood risk) because the site does not fall within a Minerals Safeguarding Area and is located within Flood Zone 1.

Table 5.17: SA scores for Policy E6 - Land North ofSwanscombe Area

SA	objective	E6
1.	To ensure that everyone has the opportunity to live in a decent home.	+?
2.	To ensure ready access to essential services and facilities for all residents.	+?
3.	To strengthen community cohesion.	+?
4.	To improve the population's health and reduce inequalities.	+?
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+?
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-
7.	To conserve the Borough's mineral resources.	-?
8.	To conserve the Borough's soils.	++
9.	To maintain and improve the quality of the Borough's waters.	-?

SA objective	E6
10. To reduce air pollution and ensure improvements in air quality.	++/
11. To avoid and mitigate flood risk.	?
12. To minimise the Borough's contribution to climate change.	++/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	/+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	?
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.185 A minor positive but uncertain effect is expected for Policy E6 in relation to SA objectives 1 (Housing), 2 (Services and facilities), 3 (Community cohesion) and 4 (Health and inequality) because the policy references residential development, leisure/recreational and commercial uses when describing suitable new uses for development in this area. The site is also located within walking distance of a GP surgery and of a primary school and a secondary school. Open spaces are located within close proximity to the site. However, it is not yet known what type of development will take place here, with the supporting text to the policy also referring to the entertainment resort, known as London Resort, proposed just north of this area. It is uncertain whether this will come forward and, if it does, exactly what mix of development would be provided. Additionally, it is likely to serve national and international visitors, rather than being a local attraction. It could also have an adverse effect on residential amenity through noise and light pollution, and potentially vibrations. The policy notes that such scale of development would require a Local Plan Review.

5.186 A minor positive uncertain effect is expected in relation to SA objective 5 (Economy) because, depending on what development is brought forward, it is likely to bring people and jobs to the area, with beneficial effects on the economy. For example, the London Resort would likely generate a number of training and employment opportunities for local residents, whilst also attracting a considerable number of tourists to the area.

5.187 Mixed significant positive and minor negative effects are expected in relation to SA objectives 6 (Sustainable travel) and 12 (Climate change) because provision is made for a Fastrack route which connects to the wider area, in addition to improved pedestrian and cycle access to Swanscombe, the River Thames and Ingress Park, in addition to upgrading Swanscombe railway station. The site also contains a number of bus stops. These measures are expected to reduce reliance on the private car, encouraging use of more active and sustainable transport modes. These measures will help minimise air pollution and greenhouse gas emissions associated with car use. However, the effects against the objectives are mixed with minor negative effects because depending on what type of development is taken forwards, could introduce a significantly higher number of cars to the area. Additional growth could also exacerbate capacity issues on existing railway services. A significant positive effect is expected in relation to SA objective 10 (Air pollution) for the reasons outlined above. The effect is mixed with a significant negative effect because the London Road AQMA runs directly through the site and it is therefore likely that residents or visitors travelling via private car will exacerbate existing air quality issues. However, the policy states that development should take account of impacts in relation to air quality.

5.188 A significant positive effect is expected in relation to SA objective 8 (Soil) because the policy focuses development on brownfield land. Therefore, development would make efficient use of this previously developed land.

5.189 A significant negative but uncertain effect is expected in relation to SA objective 11 (Flood risk) because a large proportion of the site falls within Flood Zone 3, with the remainder falling within Flood Zones 2 and 1. However, the area already benefits from flood defences. The policy also states that development should take account of impacts in relation to flood risk.

5.190 A mixed significant negative and minor positive effect is expected in relation to SA objective 13 (Biodiversity) because the site contains some priority habitats, specifically areas of deciduous woodland and coastal and floodplain grazing marsh. It is also located within close proximity of the Alkerden Lane Pit Local Wildlife Site. However, the policy states that development should take account of impacts in relation to ecology. The site is also partially identified as a Biodiversity Opportunity Area.

5.191 A significant negative effect is expected in relation to SA objective 14 (Historic environment) because the site is next to the Grade II* listed Church of All Saints. The site also contains Sites of Archaeological Significance. Therefore, development could potentially result in adverse effects on these heritage assets and their settings. The effect is recorded as uncertain because the actual effect will depend on the final design, scale and layout of development.

5.192 A minor positive effect is expected in relation to SA objective 15 (Landscape) because the policy states that any development in this area should be sensitively designed and appropriately integrated with its surrounds and the Garden City. More specifically, it must be designed in a way that addresses the unique location of the site, views to the area from the north across the River Thames and across the Marshes, in addition to views of the roofscape from London Road.

5.193 A minor negative but uncertain effect is expected in relation to SA objective 7 (Mineral resources) because the a large part of this area falls within Minerals Safeguarding Areas, some of which do not comprise previously developed land. As such, development could result in an adverse effect on access to finite mineral resources within the Borough. However, the effect is recorded as uncertain because there is a possibility that development could avoid this area, that the minerals could be worked prior to development of the site on the land that is not previously developed or that it is not viable or appropriate to extract the minerals in this location. Indeed, the policy states that development should take account of impacts in relation to minerals safeguarding.

5.194 A minor negative but uncertain effect is expected in relation to SA objective 9 (Water quality) because the site partially falls within Source Protection Zone 3. Therefore, development could potentially result in groundwater contamination. However, the policy states that development should take account of impacts in relation to groundwater quality.

Development Management

Table 5.18: SA scores for Policy M1 – Good Design for Dartford

SA	objective	M1
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	++
4.	To improve the population's health and reduce inequalities.	++
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	0
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	0
9.	To maintain and improve the quality of the Borough's waters.	0
10	To reduce air pollution and ensure improvements in air quality.	+

SA objective	M1
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	+
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	+?
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	++

5.195 Policy M1 (Good Design) promotes high quality development and states that development must be in line with the National Design Guide and a list of local design criteria. Development must respond to, reinforce and enhance positive aspects of the local area.

5.196 A significant positive effect is expected against SA objective 15 (Landscape) as the policy requires development to take into account prominent physical attributes of the local area, including the Borough's landscape. This policy requires developments to reinforce and enhance good design by integrating new development with open space, providing biodiversity gain and natural features such as rivers and lakes/ponds. As such, a minor positive effect with uncertainty is expected against SA objective 13 (Biodiversity) as the amount of biodiversity gain is not specified within the policy and may also depend on the passage of the Environment Bill, which is set to mandate 10% biodiversity net gain for most developments. This policy also requires large development to include public art which reflects the local character and heritage and proper regard is given to local heritage assets, as such a minor positive effect is expected against SA objective 14 (Historic environment).

5.197 Facilitating a sense of place, with social interaction, a physical environment encouraging health and wellbeing and inclusive and integrated neighbourhoods through careful design and layout is expected to encourage community interaction improve health and wellbeing. In addition, the policy seeks to deliver public spaces that are designed to be inclusive, safe and accessible for all communities including young, elderly, disabled and less mobile people. Therefore, significant positive effects against SA objectives 3 (Community cohesion) and 4 (Health and inequality) are expected. In addition, ensuring that the areas are connected to their surrounds via clear pedestrian and cycle linkages will have additional health and wellbeing benefits as well as a minor positive effect on SA objective 6 (Sustainable travel).

5.198 Minor positive effects are also expected against SA objectives 10 (Air pollution) and 12 (climate change) as additional and accessible active travel options are likely to reduce the reliance on the private car thereby minimising air pollution and minimising greenhouse gas emissions.

Table 5.19: SA scores for Policy M2 – Environmental andAmenity Protection

SA	objective	M2
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	+?
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	0

SA objective	M2
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	+?
To maintain and improve the quality of the Borough's waters.	+?
10. To reduce air pollution and ensure improvements air quality.	in +?
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	+?
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	+?
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	f +?

5.199 Policy M2 (Environmental and Amenity Protection) requires development to demonstrate that it does not result in any unacceptable material impacts, individually or cumulatively, on the Borough's environment or public health. The policy states that particular concern should be given to the design of proposals in areas of potential sensitivity in the built and natural environment, as such minor positive effects with uncertainty are expected against SA objectives 13 (Biodiversity) and 15 (Landscape).

5.200 Dartford has a number of areas of poor air quality designated as Air Quality Management Areas (AQMAs). These areas are where residential properties are located in close proximity to congested roads. As this policy would ensure that potential amenity factors, such as air quality, water quality, noise and light pollution and anti-social behaviour are given particular consideration especially in areas of potential sensitivity, minor positive effects are expected against SA objectives 4 (Health and inequality) and SA objective 10 (Air pollution). Minor positive effects are also expected against SA objective 9 (Water quality).

5.201 Minor positive effects are also expected against SA objective 12 (Climate change) as an improvement to air quality and decrease in traffic would likely result in the minimisation of greenhouse gas emissions.

5.202 The policy states ground contamination as a potential amenity factor that must be given particular consideration; therefore, a minor positive effect is expected against SA objective 8 (Soils).

5.203 Uncertainty is attached to each of these SA objectives as the policy states development should 'not result in unacceptable material impacts', therefore there is potential for some minor adverse impacts to occur, depending on the details of development.

Table 5.20: SA scores for Policy M3 – Sustainable Technology,Construction and Performance

SA	SA objective	
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	0

SA	objective	M3
4.	To improve the population's health and reduce inequalities.	0
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	0
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	+?
9.	To maintain and improve the quality of the Borough's waters.	++
10.	To reduce air pollution and ensure improvements in air quality.	0
11.	To avoid and mitigate flood risk.	0
12.	To minimise the Borough's contribution to climate change.	++
13.	To conserve, connect and enhance the Borough's wildlife, habitats and species.	+?
14.	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+?
15.	To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+?

5.204 Policy M3 (Sustainable Technology, Construction and Performance) requires development to contribute to the mitigation of, and adaptation to, climate change. The policy states that all residential development should achieve at least a reduction in carbon emissions of at least 19% beyond Part L

of the Building Regulations, use materials and design to increase energy efficiency and thermal performance and achieve a layout and design for the efficient management/re-use of natural resources. In addition, large residential developments should feature zero and/or low carbon features throughout the site. As such, a significant positive effect is expected against SA objective 12 (Climate change).

5.205 The policy also states that non-residential development of over 1,000sqm must achieve a BREEAM rating of 'excellent' with regard to energy performance and water efficiency and all residential development should demonstrate how a water efficiency level of 110 litres per person per day will be achieved. Therefore, significant positive effects are also expected against SA objective 9 (Water quality).

5.206 Minor positive effects are expected against SA objective 8 (Soils) as this policy states residential development should achieve a layout and design that allow for the efficient management/re-use of natural resources, which could result in the efficient use of land. However, this is uncertain.

5.207 In addition, the policy states that appropriate technology and systems should be considered to minimise any impact on local character or heritage, therefore, minor positive effects are expected against SA objectives 13 (Biodiversity), 14 (Historic environment) and 15 (Landscape). Uncertainty is attached as the location, design, layout and materials will depend upon each individual development.

Table 5.21: SA scores for Policy M4 – Flood Risk and RiversideDesign

SA objective	M4
1. To ensure that everyone has the opportunity to live in a decent home.	0

SA	objective	M4
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	+?
4.	To improve the population's health and reduce inequalities.	+?
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	0
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+?
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	0
9.	To maintain and improve the quality of the Borough's waters.	+
10	To reduce air pollution and ensure improvements in air quality.	0
11	To avoid and mitigate flood risk.	++
12	To minimise the Borough's contribution to climate change.	+
13	To conserve, connect and enhance the Borough's wildlife, habitats and species.	+?
14	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15	To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.208 Policy M4 (Flood Risk and Riverside Design) states that development along the River Thames or Darent will be expected to explore potential improvements to the riparian landscape, biodiversity, access for pedestrians and cyclists and opportunities for river-based recreation. As such, minor positive effects are expected against SA objectives 4 (Health and inequality), 6 (Sustainable travel), 13 (Biodiversity) and 15 (Landscape). Minor positive effects are also expected in relation to SA objective 3 (Community cohesion) as increased walking, cycling and recreation opportunities are likely to also increase social interaction within the community. Uncertainty is attached to each as the design and layout will depend upon opportunities to deliver the policy requirements in individual developments coming forward.

5.209 Policy M4 also states that all major development must incorporate Sustainable Drainage Systems (SuDS) to reduce water run-off and ensure that flood risk does not increase elsewhere. In addition, development that is within an area of flood risk, it will be required to incorporate flood protection and resilience measures. Therefore, significant positive effects are expected against SA objective 11 (Flood risk). Policy M4 also notes that when employing SuDS it should be multifunctional and deliver benefits to the green infrastructure network which is likely to help mitigate the Borough's contribution to climate change and can act as a natural filtration system for local watercourses. As such, minor positive effects are also expected against SA objectives 9 (Water quality) and 12 (Climate change). These could also bring benefits for biodiversity.

Table 5.22: SA scores for Policy M5 – Designated HeritageAssets – and Policy M6 – Historic Environment Strategy

SA objective	M5	M6
1. To ensure that everyone has the opportunity to live in a decent home.	0?	0?
2. To ensure ready access to essential services and facilities for all residents.	0	0

SA	objective	M5	M6
3.	To strengthen community cohesion.	0	0
4.	To improve the population's health and reduce inequalities.	0	0
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	0?	0?
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0	0
7.	To conserve the Borough's mineral resources.	0	0
8.	To conserve the Borough's soils.	0	0
9.	To maintain and improve the quality of the Borough's waters.	0	0
10.	To reduce air pollution and ensure improvements in air quality.	0	0
11.	To avoid and mitigate flood risk.	0	0
12.	To minimise the Borough's contribution to climate change.	0	0
13.	To conserve, connect and enhance the Borough's wildlife, habitats and species.	0	0
14.	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	++?	++
15.	To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+	+

5.210 Policy M5 (Designated Heritage Assets) and Policy M6 (Historic Environment Strategy) are both expected to have significant positive effects on SA objective 14 (Historic environment) because they encourage the conservation, enhancement and enjoyment of the historic environment, including both designated and non-designated heritage assets. However, uncertainty is attached to Policy M5 as it is less likely to result in enhancement of the historic environment, as it focuses on protection of designated assets (rather than enhancement).

5.211 The measures set out in Policies M5 and M6 are expected to indirectly protect the local landscape, which may be characterised by historic features. Therefore, a minor positive effect is expected in relation to SA objective 15 (Landscape).

5.212 These policies could result in restrictions for development of, or within the setting of local heritage assets, although this is uncertain. Therefore, a negligible effect with uncertainty is expected in relation to SA objectives 1 (Housing) and 5 (Economy).

Table 5.23: SA scores for Policy M7 – Affordable Housing – andPolicy M8 – Housing Mix

SA	objective	M7	M 8
1.	To ensure that everyone has the opportunity to live in a decent home.	++/-	++
2.	To ensure ready access to essential services and facilities for all residents.	0	0
3.	To strengthen community cohesion.	+	+
4.	To improve the population's health and reduce inequalities.	+	+
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+	+

SA objective	M7	M8
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0	0
7. To conserve the Borough's mineral resources.	0	0
8. To conserve the Borough's soils.	0	0
9. To maintain and improve the quality of the Borough's waters.	0	0
10. To reduce air pollution and ensure improvements in air quality.	0	0
11. To avoid and mitigate flood risk.	0	0
12. To minimise the Borough's contribution to climate change.	0	0
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0	0
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0	0

5.213 Policy M7 (Affordable Housing) aims to provide a mix of housing to support inclusive communities, with a range of rental and ownership options, thereby contributing to the vitality of the Borough. In addition, the affordable housing need for the Borough is expected to be met through the Local Plan. As such, significant positive effects are expected in relation to SA objective 1 (Housing). However, these effects are mixed with minor negative effects as there is a possibility that the higher overall affordable housing target will impact

upon the viability of residential developments, potentially slowing the rate of housing delivery.

5.214 A mix of housing with no differences in appearance between different tenures can promote community cohesion. As such, minor positive effects are expected in relation to SA objective 3 (Community cohesion). Minor positive effects are also expected in relation to SA objective 4 (Health and inequality) and 5 (Economy) because this policy could reduce inequality by making affordable housing more accessible and additional residents are likely to improve the local economy through the increase in consumer and potential workers.

5.215 Policy M8 (Housing Mix) is likely to have similar effects to Policy M7 as this policy also aims to provide a mix of housing types and sizes to meet the needs of the local communities and create vibrant and mixed communities and further reduce inequalities by providing accessible and adaptable dwellings, specialist accommodation and self/custom-build housing.

Table 5.24: SA scores for Policy M9 – Sustainable housinglocations

SA	SA objective	
1.	To ensure that everyone has the opportunity to live in a decent home.	+
2.	To ensure ready access to essential services and facilities for all residents.	+
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	+
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+

SA objective	M9
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	++
 To maintain and improve the quality of the Borough's waters. 	0
10. To reduce air pollution and ensure improvements in air quality.	+
11. To avoid and mitigate flood risk.	+?
12. To minimise the Borough's contribution to climate change.	+
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	+?
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+?

5.216 Policy M9 (Sustainable Housing Locations) states that unplanned windfall residential development will be accepted, but development must demonstrate how it is located on brownfield land, is within a convenient location, meaning it is within walking distance of a range of community facilities and services and well served by public transport or walking and cycling routes that are connected to a range of employment opportunities. This is likely to encourage sustainable modes of transport are used in preference private vehicles, thereby resulting in positive implications for health and wellbeing, ensuring residents can meet daily needs nearby and minimising air pollution and greenhouse gas emissions. As

such, this policy will likely have minor positive effects associated with many of the SA objectives 1 (Housing), 2 (Services and facilities), 4 (Health and inequality), 5 (Economy), 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change).

5.217 Significant positive effects have been identified against SA objective 8 (Soils) as this policy requires windfall development to utilise brownfield land (unless necessary to achieve a five-year housing land supply). Furthermore, a minor positive effect is expected against SA objectives 11 (Flood risk), 13 (Biodiversity) and 15 (Landscape) as directing development to brownfield land is likely to minimise any negative effects against greenfield land and permeable surfaces, local wildlife and landscape character. However, this is uncertain as brownfield land can be of high biodiversity value, within a flood zone, and the location and design of the developments are unknown at this stage.

Table 5.25: SA scores for Policy M10 – Residential AmenitySpace Provision

SA objective		M10
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	++
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	0
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+?

SA objective	M10
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	+?
 To maintain and improve the quality of the Borough's waters. 	+?
10. To reduce air pollution and ensure improvements in air quality.	+?
11. To avoid and mitigate flood risk.	+?
12. To minimise the Borough's contribution to climate change.	+?
 To conserve, connect and enhance the Borough's wildlife, habitats and species. 	+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.218 Policy M10 (Residential Amenity Space) requires residential development to provide high quality amenity space. The space must take into account a number of design considerations that will help meet health, recreation and functional needs while also contributing to the Green Grid network. As such, this policy is expected to have a significant positive effect on SA objective 4 (Health and inequality) as high-quality amenity space will improve health and wellbeing of individuals and the community through access to green space, recreation and can improve access to healthy food through food growing.

5.219 Amenity space is also likely to provide additional habitats for local wildlife by contributing to the Borough's green infrastructure network. As such, minor positive effects are expected against SA objectives 13 (Biodiversity) and 15

(Landscape). Expanding upon the green infrastructure network provides multiple benefits including provision of active travel links, reduction in soil erosion, natural filtration of water and air pollutants, carbon sequestration and minimisation of surface water flooding. In addition, the opportunity for local food growing could contribute to reducing food miles and therefore reduce the amount of associated greenhouse gas emissions. As such, minor positive effects are also expected in relation to SA objectives 6 (Sustainable travel), 8 (Soils), 9 (Water quality), 10 (Air pollution), 11 (Flood risk) and 12 (Climate change). However, uncertainty is attached as this will depend upon the location, design and layout of the amenity space.

Table 5.26: SA scores for Policy M11 – Extensions, New Dwellings and Garden Land

SA objective		M11
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	+
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	0
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	0
9.	To maintain and improve the quality of the Borough's waters.	0

SA objective	M11
10. To reduce air pollution and ensure improvements in air quality.	0
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	0
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	+
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	+
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.220 Policy M11 (Extensions, New Dwellings, and Garden Land) requires development to maintain a range of dwelling sizes and sufficient garden space, retain or enhance the local character, local environment and amenity of existing residential areas. Development proposals will be refused if they result in the significant loss of residential garden land, which has health, recreation and local food growing benefits. As such, this policy is expected to have a minor positive effect on SA objective 4 (Health and inequality) as maintaining garden space and residential amenity helps to maintain the health and wellbeing of individuals.

5.221 In addition, development proposals will be refused if they result in the erosion of local character and must ensure that the historical pattern and form of development is retained, therefore a minor positive effect is expected against SA objectives 14 (Historic environment) and 15 (Landscape). As this policy aims to maintain garden land it may help to maintain habitats for local wildlife. As such, minor positive effects are expected against SA objective 13 (Biodiversity).

Table 5.27: SA scores for Policy M12 – Gypsy, Traveller and Travelling Showpeople Accommodation

SA objective	M12
1. To ensure that everyone has the opportunity to in a decent home.	live ++
2. To ensure ready access to essential services an facilities for all residents.	nd +
3. To strengthen community cohesion.	0
4. To improve the population's health and reduce inequalities.	+
5. Facilitate a sustainable and growing economy a vital and viable town centre.	and a 0
 To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion. 	1 +
7. To conserve the Borough's mineral resources.	-?
8. To conserve the Borough's soils.	+
9. To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvemen air quality.	ts in +/-
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to clima change.	ite +
13. To conserve, connect and enhance the Borougl wildlife, habitats and species.	h's

SA objective	M12
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.222 Significant positive effects are expected in relation to SA objective 1 (Housing) as Policy M12 (Gypsy, Traveller and Travelling Showpeople Accommodation) will contribute to ensuring the residential needs of Gypsies, Travellers and Travelling Showpeople are met within the Borough through 37 gypsy and traveller pitches and one travelling showpeople plot. The policy notes there is significant potential to provide suitable accommodation within existing sites, but also includes measures to allocate land for additional pitches at Tennis Courts Sutton at Hone and Salinas Darenth Wood Road.

5.223 This policy will help ensure that gypsy and traveller pitches are located within close proximity to a range of services and facilities and that residential amenity is not significantly affected, thereby resulting in minor positive effects for SA objectives 2 (Services and facilities) and 4 (Health and inequality).

5.224 Both site allocations are located within close proximity to bus stops, which could help encourage sustainable modes of travel thereby minimising air pollution and greenhouse gas emissions. Minor positive effects are expected for SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change). Minor negative effects are also expected in relation to SA objective 10 (Air pollution) as both sites connect to AQMAs (Dartford Town Centre and London Road). As such, there is potential for these sites to result in increased traffic through these AQMAs, but traffic volumes generated by the sites are likely to be low.
5.225 Both sites lie within Mineral Safeguarding Areas (MSAs) therefore this policy could result in the sterilisation of mineral resources. However, both sites are previously developed / currently in use. Therefore, minor negative but uncertain effects are expected in relation to SA objective 7 (Mineral resources). As both sites and the policy promotes additional accommodation at authorised and tolerated sites, this policy makes efficient use of land, leading to minor positive effects in relation to SA objective 8 (Soils).

5.226 This policy seeks to ensure that gypsy and traveller pitches are screened and visually integrated into the local and wider landscape. Therefore, minor positive effects are expected in relation to SA objective 15 (Landscape).

5.227 The allocation at Tennis Courts, Sutton at Hone is within close proximity to Sutton at Hone Lakes Local Wildlife Site (LWS) and the allocation at Salinas, Darenth Wood Road is within close proximity to Darenth Wood SSSI. There is potential for the policy to harm these biodiversity assets through an increase in recreation and urban edge effects, therefore minor negative effects are expected in relation to SA objective 13 (Biodiversity).

5.228 The allocation at Tennis Courts, Sutton at Hone lies adjacent to an Area of Archaeological Significance as well as within 1km of multiple Listed Buildings and Scheduled Monuments. The potential site at Salinas, Darenth Wood Road is also within proximity of heritage assets. However, given that the sites are in existing use, the policy is not expected to affect the settings of these features, therefore negligible effects are expected in relation to SA objective 14 (Historic environment).

Table 5.28: SA scores for Policy M13 – Green Belt

SA objective	M13
 To ensure that everyone has the opportunity to live in a decent home. 	0

SA	objective	M13
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	+
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	++
9.	To maintain and improve the quality of the Borough's waters.	0
10.	To reduce air pollution and ensure improvements in air quality.	0
11.	To avoid and mitigate flood risk.	0
12.	To minimise the Borough's contribution to climate change.	0
13.	To conserve, connect and enhance the Borough's wildlife, habitats and species.	+
14.	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15.	To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.229 Policy M13 (Green Belt) states that inappropriate development within the Green Belt will be resisted in line with national policy. In addition, where developments are considered appropriate within the Green Belt, in line with national policy, proposals will be supported if they contribute to the objective of making the Green Belt a recreational, ecological and agricultural resource. As such, minor positive effects are expected in relation to SA objectives 4 (Health and inequality) and 13 (Biodiversity) as the policy is likely to conserve the Green Belt for local wildlife and could maintain or improve local access to open space.

5.230 In addition, minor positive effects are expected in relation to SA objective 15 (Landscape) as, whilst Green Belt is not a landscape designation, the policy notes the importance of the openness of the Green Belt and its effects on local character.

5.231 Significant positive effects are expected in relation to SA objective 8 (Soils) because the policy states that development must not result in the loss of the best and most versatile agricultural land. In addition, restricting development within the Green Belt will indirectly protect soil resources.

5.232 The policy supports some diversification of use, including farm diversification, which could help to support local farmers and as such is expected to have minor positive effects on SA objective 5 (Economy).

Table 5.29: SA scores for Policy M14 – Green and BlueInfrastructure and Open Space Provision

SA objective	M14
1. To ensure that everyone has the opportunity to in a decent home.	live 0
2. To ensure ready access to essential services a facilities for all residents.	nd +
3. To strengthen community cohesion.	+

SA	objective	M14
4.	To improve the population's health and reduce inequalities.	++
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	+
9.	To maintain and improve the quality of the Borough's waters.	+
10.	To reduce air pollution and ensure improvements in air quality.	+
11.	To avoid and mitigate flood risk.	+
12.	To minimise the Borough's contribution to climate change.	+
13.	To conserve, connect and enhance the Borough's wildlife, habitats and species.	++
14.	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15.	To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	++

5.233 Policy M14 (Green and Blue Infrastructure and Open Space Provision) requires new development to contribute to the Green Infrastructure (GI) network through local standards, such as, if sites are 20ha and over, at least 30% of the site area must contribute to the GI network. Such space should be

multifunctional, including opportunities for formal and informal recreation, habitats and corridors for wildlife, native trees/landscaping and other measures which will reduce the impacts of climate change. In addition, this policy will help to preserve Protected Local Green Spaces from development to ensure they maintain their role in supporting sustainable and attractive neighbourhoods. As such, significant positive effects are expected against SA objective 4, (Health and inequality) because sufficient space for outdoor recreation is likely to improve health and wellbeing. This will also create opportunities for community interaction, therefore minor positive effects are expected in relation to SA objective 3 (Community cohesion). Minor positive effects are also expected in relation to SA objective 2 (Services and facilities) as the policy would maintain existing open spaces and ensure that new development makes provision for sufficient new open space.

5.234 As this policy requires spaces to be multifunctional, including habitats and corridors for wildlife and native trees/landscaping, it is expected to benefit biodiversity and enhance the local landscape, leading to significant positive effects on SA objectives 13 (Biodiversity) and 15 (Landscape).

5.235 Minor positive effects are expected against SA objectives 8 (Soils), 9 (Water quality), 10 (Air quality), 11 (Flood risk) and 12 (Climate change) as the GI network provides multiple benefits, including reducing soil erosion, natural filtration of water, filtration of air pollutants, reduces the risk of flooding and carbon sequestration. A comprehensive, multifunctional GI network will also help the Borough adapt to and minimise the Borough's contribution to climate change.

5.236 Minor positive effects are also expected against SA objectives 5 (Economy) and 6 (Sustainable travel) because the provision of adequate public open space is likely to be vital in improving the overall attractiveness of the Borough, which may attract more people to live and work in the area as well as improve its attractiveness to visitors. In addition, there is potential for pedestrian and cycle routes to be incorporated into open space in the Borough through the policy, both in existing open space and in new developments. This may result in an increased uptake of active travel amongst residents as a means of travelling to work or to access services and facilities.

Table 5.30: SA scores for Policy M15 – Biodiversity andLandscape

SA objective	M15
1. To ensure that everyone has the opportunity to I in a decent home.	ive 0
2. To ensure ready access to essential services an facilities for all residents.	nd 0
3. To strengthen community cohesion.	0
4. To improve the population's health and reduce inequalities.	+
5. Facilitate a sustainable and growing economy an vital and viable town centre.	nd a 0
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	0
9. To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvement air quality.	rs in +
11. To avoid and mitigate flood risk.	+
12. To minimise the Borough's contribution to climat change.	te 0
13. To conserve, connect and enhance the Borough wildlife, habitats and species.	ı's ++

SA objective	M15
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	++

5.237 Policy M15 (Biodiversity and Landscape) states that the expected national biodiversity net gain requirements will apply to all new development. Net gains within Dartford should be made by enhancing existing habitats and/or creating new habitats on site or in cases where that is not achievable, off-site within Biodiversity Opportunity Areas. These will also need to be informed by and link to the Dartford Green Grid network and any potential Local Nature Recovery Strategy. In addition, development on designated biodiversity sites will not be granted unless it can clearly show that the biodiversity value of the site will not be adversely affected. The policy also states that all new development should be designed and laid out in a way that is sympathetic to the local landscape setting and major development should deliver landscaping schemes that enhance biodiversity and use native species. As such, significant positive effects are expected in relation to SA objectives 13 (Biodiversity) and 15 (Landscape).

5.238 Major developments are expected to incorporate sustainable drainage measures and build climate resilience. In addition, the following elements will also need to be incorporated: street trees to create attractive areas and provide shading; planting of particular species to reduce the impact of air pollution; and manage the landscape for the lifetime of the development. These initiatives are expected to improve health and wellbeing, filter air pollutants and reduce the risk of flooding. As such, minor positive effects are expected against SA objectives 4 (Health and inequality), 10 (Air pollution) and 11 (Flood risk).

Table 5.31: SA scores for Policy M16 – Travel Management

SA	objective	M16
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	+
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	+
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	0
9.	To maintain and improve the quality of the Borough's waters.	0
10	To reduce air pollution and ensure improvements in air quality.	+
11.	To avoid and mitigate flood risk.	0
12	To minimise the Borough's contribution to climate change.	+
13	To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14.	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0

SA objective	M16
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0

5.239 Policy M16 (Travel Management) requires development to be located in sustainable locations to minimise and manage arising transport impacts. In addition, development will not be permitted if it would result in severe adverse impacts to air quality, traffic congestion, safety of pedestrian, cyclists and other road-users and on-street parking. As such, this policy is likely to result in the minimisation of greenhouse gas emissions and reduction in poor air quality by ensuring that development does not give rise to significant localised effects on congestion. As such, minor positive effects are expected in relation to SA objectives 10 (Air quality) and 12 (Climate change). Minor positive effects are also expected against SA objective 4 (Health and inequality) as there is potential public safety benefits that could arise from resisting development in locations that would result in adverse air quality and traffic impact.

5.240 The policy also states that new development sites should be laid out to allow for routes into and within the site for Fastrack, buses and taxis thereby creating good connections to services and facilities and employment opportunities. In addition, this policy aims to capitalise on the opportunities provided by the river through the safeguarding of wharves. This is likely to benefit the local economy as these will likely be used for the transport of goods and materials. Therefore, minor positive effects are also expected in relation to SA objectives 2 (Services and facilities) and 5 (Economy).

Table 5.32: SA scores for Policy M17 – Active Travel, Accessand Parking

SA objective		M17
1. To ensure that everyone has th in a decent home.	e opportunity to live	0
2. To ensure ready access to essentiate facilities for all residents.	ential services and	+
3. To strengthen community cohe	sion.	+
4. To improve the population's heat inequalities.	alth and reduce	+
5. Facilitate a sustainable and gro vital and viable town centre.	wing economy and a	+
6. To reduce the need to travel an sustainable and active alternative vehicles to reduce congestion.	.	++
7. To conserve the Borough's min	eral resources.	0
8. To conserve the Borough's soils	S.	0
 To maintain and improve the que Borough's waters. 	ality of the	0
10. To reduce air pollution and ensi air quality.	ure improvements in	+/-
11. To avoid and mitigate flood risk		0
12. To minimise the Borough's cont change.	tribution to climate	+/-
13. To conserve, connect and enha wildlife, habitats and species.	ance the Borough's	0

SA objective	M17
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0

5.241 Policy M17 (Active Travel, Access and Parking) requires development to be designed and laid out in such a way as to promote walking, cycling and public transport use through the provision of attractive and safe routes. These routes must also provide easy, safe and well-lit access to the Green Grid network, existing neighbourhoods, urban area and key facilities. In addition, storage facilities for cyclist must also be provided. As such, significant positive effects are expected in relation to SA objective 6 (Sustainable travel).

5.242 Minor positive effects are expected against SA objectives 2 (Services and facilities) and 4 (Health and inequality) as this policy is expected to make active travel more accessible which could make it easier to access local services and benefit health and wellbeing. Furthermore, the policy promotes convenient, safe and well-lit active travel routes, as well as design features that are specifically tailored for people with mobility and sensory difficulties. Minor positive effects are also expected in relation to SA objective 3 (Community cohesion) as increased uptake in walking and cycling is likely to increase interactions between members of the community.

5.243 Minor positive effects are expected against SA objective 5 (Economy) as additional active travel routes will create better connections between residential areas and employment opportunities.

5.244 As this policy requires development to be designed to promote walking, cycling and public transport use, it is likely to contribute to a high modal shift in local transport choices and therefore a reduction in greenhouse gas emissions

and poor air quality. In addition, Electric Vehicle Charging points must be provided at all new residential properties. Therefore, minor positive effects are expected in relation to SA objectives 10 (Air quality) and 12 (climate change). However, these effects are mixed with minor negative effects as the policy will also result in car parking, which may make cars an attractive mode of travel.

Table 5.33: SA scores for Policy M18 – Community Uses

SA objective	M18
1. To ensure that everyone has the opportunity to live in a decent home.	è 0
2. To ensure ready access to essential services and facilities for all residents.	+
3. To strengthen community cohesion.	++
4. To improve the population's health and reduce inequalities.	+
5. Facilitate a sustainable and growing economy and vital and viable town centre.	a 0
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	0
9. To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvements i air quality.	n +
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	+

SA objective	M18
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0

5.245 Policy M18 (Community Uses) states that new community facilities will be supported if they are in a convenient location and reflect the needs of the existing and emerging communities. The retention and improvement of local community facilities are important to the vitality and health of a community. Therefore, significant positive effects are expected against SA objective 3 (Community cohesion). Minor positive effects are expected against SA objectives 2 (Services and facilities) and 4 (Health and inequality) as the retention and creation of community facilities is likely to benefit the health and wellbeing of the community members and provide an additional service where needed.

5.246 To ensure that active travel can be utilised to access new community facilities, they should be conveniently located. As such, minor positive effects are expected against SA objectives 6 (Sustainable travel), 10 (Air quality) and 12 (Climate change) as it is likely to help minimise car use and associated emissions of air pollution and greenhouse gas emissions.

Table 5.34: SA scores for Policy M19 – Sustainable EconomicLocations

SA objective	M19
1. To ensure that everyone has the opportunity to live in a decent home.	e 0
2. To ensure ready access to essential services and facilities for all residents.	+
3. To strengthen community cohesion.	0
4. To improve the population's health and reduce inequalities.	0
5. Facilitate a sustainable and growing economy and vital and viable town centre.	a _++
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	0
To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvements i air quality.	n +
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	+
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0

SA objective	M19
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0

5.247 Policy M19 (Sustainable Economic Locations) states that new business and services in Classes B and E will be supported if they are appropriately located and designed, with developments to be accessible by public and active transport at Central Dartford or Ebbsfleet Garden City or identified Employment Areas or the network of Retail Centres. As a result significant positive effects are expected in relation to SA objective 5 (Economy). Furthermore, development of business and services in convenient locations, such as town centres, is likely to ensure a majority of residents have easy access to services and facilities as they may be able to access services either near their homes or their places of work, therefore minor positive effects are also expected in relation to SA objective 2 (Services and facilities).

5.248 Minor positive effects are also expected against SA objectives 10 (Air pollution) and 12 (Climate change) as providing employment opportunities and services within conveniently located areas are likely to lead to a reduction in greenhouse gas emissions and poor air quality.

Table 5.35: SA scores for Policy M20 – Provision for LocalBusiness and Skills

SA objective	M20
 To ensure that everyone has the opportunity to live in a decent home. 	0

SA	objective	M20
2.	To ensure ready access to essential services and facilities for all residents.	+
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	0
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	++
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	0
9.	To maintain and improve the quality of the Borough's waters.	0
10.	To reduce air pollution and ensure improvements in air quality.	0
11.	To avoid and mitigate flood risk.	0
12.	To minimise the Borough's contribution to climate change.	0
13.	To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14.	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15.	To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0

5.249 Policy M20 (Provision for Local Business and Skills) states that large proposals for offices, industrial/distribution, retail/leisure and other uses should contribute to the accommodation needs of local business and training needs of the Borough. Therefore, significant positive effects are expected in relation to SA objective 5 (Economy) as this policy could lead to additional and more diverse employment opportunities within the Borough through increased training/apprenticeship opportunities and support for small and start-up businesses. This could help retain residents within the area, with positive effects on the economy. Furthermore, additional retail and leisure services is likely to ensure a majority of residents have easy access to additional services, therefore minor positive effects are also expected in relation to SA objective 2 (Services and facilities).

Table 5.36: SA scores for Policy M21 – Identified EmploymentAreas

SA	objective	M21
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	0
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	++
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	0

SA objective	M21
 To maintain and improve the quality of the Borough's waters. 	0
10. To reduce air pollution and ensure improvements in air quality.	+/-
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	+/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0

5.250 Policy M21 (Identified Employment Areas) sets out a supportive approach for employment proposals at the Employment Areas, subject to criteria that depend on whether proposals concern industrial or service-based proposals. The policy states that the Identified Employment Areas will be maintained and developed for additional high quality, accessible and affordable commercial premises and a diverse range of new jobs, with improved transport provision and environmental benefits achieved. Therefore, a significant positive effect is expected in relation to SA objective 5 (Economy).

5.251 This policy expects major development to be located within easy walking distance of a railway station or Fastrack, as such it could minimise air pollution and greenhouse gas emissions. Therefore, minor positive effects are expected in relation to SA objective 10 (Air pollution) and 12 (Climate change). However, minor negative effects are also expected as good vehicle access and parking could make the private car a more attractive mode of travel.

Table 5.37: SA scores for Policy M22 – Bluewater

SA	objective	M22
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	0
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	0
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	++
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	0
9.	To maintain and improve the quality of the Borough's waters.	0
10.	To reduce air pollution and ensure improvements in air quality.	+/-
11.	To avoid and mitigate flood risk.	+
12.	To minimise the Borough's contribution to climate change.	+/-
13.	To conserve, connect and enhance the Borough's wildlife, habitats and species.	+?
14.	To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0

SA objective	M22
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+?

5.252 Policy M22 (Bluewater) aims to maintain and enhance Bluewater's status as a regional shopping centre. The policy sets out how development for activities in C1, E and F Use classes will be permitted if the proposals do not undermine Bluewater's role as a regional shopping centre, but rather show how it will help maintain its status. Also, the impact on the highway network must be minimal and improved access by and to public and active travel secured. The policy requires that there should be a particular focus within a Travel Plan to increase the use of sustainable travel by employees and neighbouring communities. As such, significant positive effects are expected in relation to SA objective 5 (Economy). Minor positive effects are also expected against SA objective 6 (Sustainable travel) as proposals must provide improved access by sustainable transport, where appropriate.

5.253 Mixed minor positive and minor negative effects are expected in relation to SA objectives 10 (Air pollution) and 12 (Climate change) as the policy seeks to manage traffic and promote sustainable travel. However, enhancing the offer at Bluewater is likely to attract additional people from further afield, leading to an increase in visitors by car, thus increasing air pollution and greenhouse gas emissions.

5.254 The policy also states that proposals must maintain the original integrity of the centre and that the parkland setting must be maintained and enhanced as a recreational and biodiversity resource and as flood risk mitigation. As such, minor positive effects are expected against SA objectives 11 (Flood risk), 13 (Biodiversity) and 15 (Landscape). However, uncertainty is attached to SA objectives 13 and 14, as changes to use and configuration of land at the site could result in disturbance to ecology, or alter the visual and landscape impact of the site.

Table 5.38: SA scores for Policy M23 – District and LocalCentres

SA objective		M23
1. To ensure in a decent	that everyone has the opportunity to live the terms of terms of the terms of te	+
	ready access to essential services and r all residents.	+
3. To strength	hen community cohesion.	+
4. To improve inequalities	e the population's health and reduce s.	+
	a sustainable and growing economy and a able town centre.	+
sustainable	the need to travel and encourage e and active alternatives to motorised reduce congestion.	0
7. To conserv	ve the Borough's mineral resources.	0
8. To conserv	ve the Borough's soils.	+
9. To maintai Borough's	n and improve the quality of the waters.	0
10. To reduce air quality.	air pollution and ensure improvements in	0
11. To avoid a	nd mitigate flood risk.	0
12. To minimis change.	se the Borough's contribution to climate	0
	ve, connect and enhance the Borough's bitats and species.	0

SA objective	M23
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	+

5.255 The supporting text for Policy M23 (District and Local Centres) notes that accessible smaller centres will act as the focus for local convenience shopping and community facilities in the Borough. The evolution and diversification will be permitted if they continue their essential local function. This policy allows for redevelopment within District and Local Centres if the redevelopment shows how it will improve the local environment of the centre. Therefore, minor positive effects are expected against SA objective 5 (Economy). Minor positive effects are also expected in relation to SA objective 1 (Housing) as the supporting text for the policy notes that residential development would be appropriate.

5.256 The policy would protect local amenities in local centres and could help provide more as change of use to Class F uses is permitted. In addition, community uses will be allowed within the District Centres, which promotes accessibility for a large number of residents thereby increasing social interaction and health and wellbeing. As such, minor positive effects are expected in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion) and 4 (Health and inequality).

5.257 Minor positive effects are also expected in relation to SA objective 8 (Soils) as this policy could promote efficient use of land through the redevelopment of the District and Local Centres. In addition, as the policy is likely to improve the local environment within the District and Local Centres it is expected that the local townscape will also improve. As a result, minor positive effects are expected in relation to SA objective 15 (Landscape).

Table 5.39: SA scores for Policy M24 – Food and DrinkEstablishments

SA	objective	M24
1.	To ensure that everyone has the opportunity to live in a decent home.	0
2.	To ensure ready access to essential services and facilities for all residents.	+
3.	To strengthen community cohesion.	0
4.	To improve the population's health and reduce inequalities.	+?
5.	Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6.	To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	0
7.	To conserve the Borough's mineral resources.	0
8.	To conserve the Borough's soils.	0
9.	To maintain and improve the quality of the Borough's waters.	0
10	To reduce air pollution and ensure improvements in air quality.	0
11.	To avoid and mitigate flood risk.	0
12	To minimise the Borough's contribution to climate change.	0
13	To conserve, connect and enhance the Borough's wildlife, habitats and species.	0

SA objective	M24
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0

5.258 Policy M24 (Food and Drink Establishments) promotes food and drink uses across the network of retail centres and provides increased protection for public houses. Minor positive effects are expected in relation to SA objective 2 (Services and facilities) and 5 (Economy) as additional food and drink establishments could provide residents with a range of food and leisure choices. These would also bring employment opportunities and contribute to creating a lively evening economy in the area.

5.259 In requiring food and drink establishments to ensure no detrimental effect on residential amenity and environmental quality, and limiting the clustering of hot food takeaways, this policy may help ensure a pleasant environment in the town centre and a sense of safety, resulting in positive effects on SA objective 4 (Health and wellbeing). However, uncertainty is attached because the policy states no 'material detrimental effects' are permitted, but it is not clear what is defined as a material detrimental effect.

Chapter 6 Cumulative Effects of the Dartford Local Plan and Mitigation

Introduction

6.1 Chapter 5 sets out the likely effects of the individual policies and site allocations set out in the Local Plan. This section brings together the effects of these separate elements to describe the likely cumulative effects of the Local Plan as a whole.

6.2 In addition, consideration is given to any effects that may arise incombination with planned strategic growth in surrounding areas and/or other strategic development projects.

6.3 This chapter also recommends measures to mitigate any residual effects of the Local Plan.

Cumulative Effects

SA objective 1: To ensure that everyone has the opportunity to live in a decent home

6.4 The Plan seeks to meet the housing need for Dartford over the plan period, an average of 790 dwellings per annum. In addition, Policies M7 (Affordable Housing) and M8 (Housing Mix), along with allocations and area-specific policies seek to ensure a suitable mix of housing. Whilst requiring developer

contributions and enhanced sustainability have potential to affect viability, it is still expected that the housing targets set out in the plan can be achieved.

6.5 Overall, significant positive effects are expected for this SA objective.

SA objective 2: To ensure ready access to essential services and facilities for all residents

6.6 The Plan directs new development to the Central Dartford and to Ebbsfleet Garden City. Central Dartford is well served by existing services and facilities, and Ebbsfleet Garden City will provide a range of new services and facilities to support development. In addition, the focus on sustainable and active transport in the Plan should help ensure residents have good access to services and facilities elsewhere, if required.

6.7 The Plan also requires provision of new services and facilities to support development, with Policy S2 (Infrastructure Planning Strategy) seeking to ensure demand is managed within capacity. It will be important to ensure new infrastructure is provided early on in development, so that existing services and facilities do not become overwhelmed by demand.

6.8 Overall, significant positive effects are expected in relation to this SA objective.

SA objective 3: To strengthen community cohesion

6.9 The Plan is expected to help strengthen community cohesion in a range of ways. By encouraging active transport and provision of green/open space, as

well as new community facilities and other leisure and recreation opportunities, the plan is expected to increase the levels of interaction between residents, which can help foster a sense of community. In addition, Policy M18 (Community Uses) supports creation of new community uses, including a requirement for strategic developments to provide these at an early stage, which will provide space for residents to mix.

6.10 Overall, a significant positive effect is expected in relation to this objective.

SA objective 4: To improve the population's health and reduce inequalities

6.11 The Plan is expected to contribute to maintaining and improving the health of the population by promoting active travel and providing recreational opportunities, particularly via the provision of green space. In addition, mental health and wellbeing will be positively impacted by creating attractive places, particularly via Policy M1 (Good Design for Dartford) and through regeneration of Central Dartford, and encouraging community interaction.

6.12 The Plan may also help reduce inequalities by ensuring provision of accessible and adaptable dwellings, and dwellings suitable for wheelchair users, as well as custom and self-build dwellings (Policy M8: Housing Mix) and in requiring there to be no segregation between or difference in appearance of different tenures of housing (Policy M7: Affordable Housing). Accessibility to services and facilities discussed for SA objective 2 above will also contribute to ensuring good levels of health and wellbeing.

6.13 However, some adverse effects recorded for other objectives, such as potential for increased air pollution (SA objective 10), could mean that improvements in physical health are not as great as would otherwise be expected.

6.14 Overall, a mixed significant positive and minor negative effect is expected for this SA objective.

SA objective 5: Facilitate a sustainable and growing economy and a vital and viable town centre

6.15 The Plan provides for new employment via mixed use development at the allocation sites and regeneration of Central Dartford, which is also expected to contribute to ensuring Dartford remains a vital and viable town centre. Further employment land and a new centre will be provided at Ebbsfleet Garden City, particularly Ebbsfleet Central. Whilst Ebbsfleet Central is intended to serve the new Garden City, there is a risk it could draw people away from Dartford Town Centre, particularly when it is first established, as it will be a new place to explore for those living in Dartford (and Gravesham).

6.16 Nevertheless, the Plan overall supports a vibrant economy in Dartford, including supporting a variety of businesses, such as including provision for small businesses and affordable accommodation, set out in Policy M20 (Provision for Local Business and Skills). Enabling evolution of Bluewater (Policy M22: Bluewater) and potential large-scale development north of Swanscombe (Policy E6: Land north of Swanscombe Area) may help attract visitors to the Borough, stimulating further investment and spending.

6.17 Overall, significant positive effects are expected for this SA objective.

SA objective 6: To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion

6.18 As set out for SA objective 2 (services and facilities) the Plan seeks to locate housing development where there is existing access to services and facilities, or where these will be provided as part of a comprehensive new development at Ebbsfleet Garden City, therefore reducing the need to travel. In terms of employment development, Policy M19 (Sustainable Economic Locations) will help reduce the need to travel by locating employment in easy to access locations, i.e. Central Dartford, Ebbsfleet Garden City or near sustainable transport links. This, in combination with enhancing active travel links and provision of new infrastructure, is expected to reduce the need to travel by car.

6.19 In addition, the Plan has a strong emphasis on sustainable transport, including maximising opportunities for strategic transport upgrades, such as the Crossrail extension and Fastrack bus services/routes set out in Policy S2 (Infrastructure Planning Strategy). This is likely to encourage travel by sustainable modes of transport. Whilst the increase in development in the Borough will likely result in a greater number of cars on the road overall, and potential for associated increases in congestion, the Plan goes a long way to mitigate this by promoting sustainable modes of transport.

6.20 Overall, mixed significant positive and minor negative effects are expected for this objective.

SA objective 7: To conserve the Borough's mineral resources

6.21 The majority of policies are not expected to affect this objective. The Plan could lead to sterilisation of some mineral deposits, although in some cases this is in relation to mineral deposits underlying previously developed land, which are unlikely to be extracted anyway.

6.22 Overall, minor negative effects are expected.

SA objective 8: To conserve the Borough's soils

6.23 The majority of development supported by the Plan is to take place on brownfield land, which is considered an efficient use of land and likely to minimise the amount of best and most versatile agricultural land lost to development. Whilst there is a possibility that some development will take place on agricultural land, the plan seeks to maximise use of brownfield land.

6.24 Overall, significant positive effects are expected for this objective.

SA objective 9: To maintain and improve the quality of the Borough's waters

6.25 A large proportion of the Borough is covered by Source Protection Zones, including many areas proposed for development, or redevelopment. In addition, it is not known whether there is capacity at the appropriate wastewater treatment works to accommodate the level of development proposed.

6.26 Nevertheless, Policy M3 (Sustainable Technology, Construction and Performance) requires development to demonstrate water efficiency, which will help minimise increases in demand on water supply and wastewater treatment. Policy M2 requires development to demonstrate it will not have unacceptable impacts on water quality, including groundwater source protection zones.

6.27 Overall, mixed minor positive effects are expected for this SA objective.

SA objective 10: To reduce air pollution and ensure improvements in air quality

6.28 Effects on this objective are largely driven by transport. As explained for SA objective 6, the Plan is expected to reduce the need to travel by car and promotes a modal shift to more sustainable modes of transport. Nevertheless, a substantial amount of development is planned to come forward in the Borough, which will inevitably result in more cars on the road.

6.29 In addition, whilst focusing development in Central Dartford and Ebbsfleet is expected to minimise car use overall, it is likely to lead to increases in traffic within existing AQMAs, therefore exacerbating air quality issues in these areas. However, Policy M2 requires development to demonstrate it will not have unacceptable impacts on air quality, particularly within or adjacent to AQMAs.

6.30 Overall, mixed significant positive and minor negative effects are expected for this objective.

SA objective 11: To avoid and mitigate flood risk

6.31 Much of the northern part of Dartford Borough, including a large proportion of land identified for development in the Plan, is at risk of flooding from the

Thames, and the River Darent poses a flood risk to Dartford Town Centre as well as other development alongside this river. Both the River Thames and part of the River Darent benefit from flood defences, although climate change poses an ongoing risk of increases in flooding.

6.32 In focusing on previously developed land, the plan is expected to have limited effects on surface water flooding and seeks to manage flood risk. In particular, Policy M4 (Flood Risk and Riverside Design) requires that development does not constrain the future management and upgrading of flood defences, must demonstrate it is safe from all types of flooding for the lifetime of the development, and must not increase the risk of flooding elsewhere. This policy also requires major development to incorporate SuDS and the plan as a whole promotes maintenance and provision of green infrastructure, which can help manage flood risk.

6.33 Overall, Policy M4 is considered sufficient to address flood risk concerns, therefore a minor positive effect is expected for this objective.

SA objective 12: To minimise the Borough's contribution to climate change

6.34 Effects on this objective are largely driven by transport. As explained for SA objective 6, the Plan is expected to reduce the need to travel by car and promotes a modal shift to more sustainable modes of transport. Nevertheless, a substantial amount of development is planned to come forward in the Borough, which will inevitably result in more cars on the road and therefore greenhouse gas emissions.

6.35 With respect to built development, the Plan seeks to achieve energy efficiency and minimise carbon emissions through Policy M3 (Sustainable Technology, Construction and Performance).

6.36 Overall, mixed significant positive and minor negative effects are expected for this objective.

SA objective 13: To conserve, connect and enhance the Borough's wildlife, habitats and species

6.37 Some development locations set out in the Plan include, or are in close proximity to, ecologically important or sensitive areas, such as priority habitat, ancient woodland, and nationally and locally designated biodiversity sites. Development has potential to lead to direct loss of or damage to these features, or indirect damage, for example through increases in recreation and urban edge effects.

6.38 However, the Plan promotes biodiversity net gain, as well as protection and enhancement of the green infrastructure network, which is likely to be beneficial to biodiversity through habitat creation, particularly as a result of Policy M15 (Biodiversity and Landscape).

6.39 In addition, the Plan promotes delivery and management of an estuarine ecological park on the Swanscombe Peninsula, which could be significant in promoting the important habitats at this location, as well as educating the public about them.

6.40 The Habitats Regulations Assessment (HRA) of the Local Plan **[See reference 7]** identified potential for the Local Plan to result in likely significant effects on the Thames Estuary and Marshes SPA/Ramsar and the Medway Estuary and Marshes SPA/Ramsar as a result of increased recreational pressure. However, the HRA concluded that the supporting text to Policy M15, regarding the need to follow the approach set out in the Council's document 'Habitats Regulations and Large Sites in Dartford Borough – Guidance for Developers (2021)', should ensure the Local Plan does not result in any adverse effects on the integrity of the SPA and Ramsar sites.

6.41 Overall mixed significant positive and minor negative effects are expected.

SA objective 14: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment

6.42 Many of the development locations set out in the Plan are in close proximity to designated heritage assets, including Conservation Areas and Listed Buildings. A large part of the proposed Ebbsfleet Garden City and Dartford Town Centre coincide with Sites of Archaeological Significance. As such, development has potential to result in harm to these assets and their settings.

6.43 Policies M5 (Designated Heritage Assets) and M6 (Historic Environment Strategy) go a long way to mitigating this, as they require development to protect and enhance the historic environment.

6.44 As such, overall mixed minor positive and minor negative effects are expected.

SA objective 15: To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape

6.45 In focusing on development of brownfield land and regeneration, the Plan is likely to result in improvements to townscape. In addition, the open nature of the countryside is likely to be maintained.

6.46 Development of Ebbsfleet Garden City will result in a large-scale landscape change. However, Policies E1 (Ebbsfleet Garden City Strategy), E2 (Ebbsfleet Garden City Development Principles), E4 (Central Ebbsfleet Allocation), E5 (Ebbsfleet South and West Area), E6 (Land North of Swanscombe Area) and Policy M1 (Good Design for Dartford) promote good design and provision of green infrastructure, which should help to ensure an attractive new development. In addition, Policy M15 (Biodiversity and Landscape) requires development to be sensitive to the existing landscape and requires major development to deliver landscaping schemes.

6.47 Overall, minor positive effects are expected for this SA objective.

In Combination Effects

6.48 The effects of development are not limited to within local authority boundaries and some development, particularly Nationally Significant Infrastructure Projects (NSIPs) are considered at a national level, by the Planning Inspectorate, rather than the local authority. This section identifies other development that could have sustainability impacts in combination with the Dartford Local Plan and discusses these effects.

6.49 The neighbouring authorities of Bexley, Sevenoaks and Gravesham are all in the process of preparing new or revised Local Plans (note that Sevenoaks District Council has lodged an application to appeal against an unsuccessful Judicial Review of their draft Local Plan). These authorities have all recognised a need to provide for additional housing and employment development in their areas. Dartford also has a connection further afield with London, Essex and the rest of Kent, due to the strategic road links in the Borough; the A2 and M25/A282, including the Dartford Crossing, which provides the only direct road link between Kent and Essex.

6.50 Additional development in surrounding areas is likely to have a significant negative in-combination effect with regards to SA objectives 10 (Air pollution) and 12 (Climate Change), as this will add to the number of vehicles on these strategic roads and associated increases in congestion. In addition, a minor negative effect is expected for SA objectives 4 (Health and wellbeing) and 13 (Biodiversity), as increases in air pollution have potential to negatively impact the health of people and habitats along these roads.

6.51 A strategic new road crossing, the Lower Thames Crossing, is proposed to the east of Dartford, and would create a new river crossing from the M25 north of the river, through Thurrock, to join the A2 east of Gravesend. The application for this NSIP project has been withdrawn, but the applicant (Highways England) intends to resubmit it. The purpose of the Lower Thames Crossing is to provide an additional road link across the river, east of London, in part to reduce pressure on the Dartford Crossing. As such, if granted consent, the Lower Thames Crossing would help to mitigate an increase in traffic on the M25/A282 in Dartford, although there is still likely to be an overall increase in traffic and congestion, and associated air pollution and greenhouse gas emissions. It should be noted that the A2 is likely to be a major route to and from the Lower Thames Crossing and therefore this road may experience a greater increase in traffic.

6.52 The London Resort is an NSIP proposal on the Swanscombe Peninsula, which lies within Dartford. An application has been submitted to the Planning Inspectorate for an entertainment resort, expected to consist of events spaces, themed rides and attractions, entertainment venues and hotels, along with
associated transport and parking infrastructure, as well as flood defence works and habitat enhancement. Policy E6 (Land North of Swanscombe Area) of the Local Plan acknowledges this proposal and states that a Local Plan Review will be required if it is to go ahead. The development of the London Resort could have substantial impacts on a number of SA objectives, particularly in combination with the development of Ebbsfleet Garden City. The impacts will be assessed through the NSIP and, in the event that consent is granted, through a Local Plan Review. The concept of an entertainment resort at this location was assessed in the SA of the Preferred Options Consultation Document (Main Plan Option 5a). A summary of the assessment results are presented in Chapter 4 and Appendix C. London Resort Company Holdings, who submitted the NSIP proposal responded to the consultation of the SA of the Preferred Options Consultation Document. Their comments and the response to these are set out in Appendix A (note that at the time of responding to these comments the NSIP proposal had not yet been submitted).

6.53 Ebbsfleet Garden City is a cross-boundary development, which includes land both in Dartford and Gravesham. Delivery of the Garden City is being coordinated by Ebbsfleet Development Corporation, which acts as the local planning authority for determining planning applications in the Garden City. The majority of development for the Garden City is expected to come forward within Dartford and has been addressed by Policies in the Ebbsfleet and Swanscombe section of the plan (Policies E1 to E6), there are considered to be no substantial, additional effects beyond those recorded in the policy assessments and cumulative effects assessment.

Residual Negative Effects and Recommendations for Mitigation

6.54 Having considered cumulative and in combination effects, residual negative effects are expected for the following objectives:

- SA objective 4 (Health and wellbeing)
- SA objective 6 (Sustainable travel)

- SA objective 7 (Mineral resources)
- SA objective 10 (Air pollution)
- SA objective 12 (Climate change)
- SA objective 13 (Biodiversity)
- SA objective 14 (Historic environment)

6.55 LUC's recommendations for mitigating these residual effects are set out below. These were provided to Dartford Borough Council prior to finalising the Local Plan. The Council has provided a response to each of the recommendations below.

Recommendation

6.56 Residual negative effects for SA objectives 4 (Health and wellbeing), 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) can be considered together, as all relate to an increase in traffic in the Borough and associated increases in air pollution and greenhouse gas emissions. The Plan already goes a long way to address this, for example by promoting a modal shift to more sustainable transport, requiring all new residential properties to have electric vehicle charging points and for a proportion of parking spaces provided as part of new employment to have electric vehicle charging points. Whilst increased traffic is, to some extent, an inevitable consequence of development and an increasing population, it could be further mitigated by measures outside the influence of the Local Plan, such as encouraging a move to electric vehicles for public transport and commercial use. The Council could also partner with surrounding local authorities, the Port of London Authority and industry to establish how best to use the river, including investing in the most efficient and low-emission river transport. Finally, community outreach, including community champions and projects to improve the attractiveness and safety of existing routes should be implemented to encourage active travel.

Council Response

6.57 The Council noted the recommendations, which are outside the scope of planning policy content for the Local Plan. Policy M17 (Active Travel, Access and Parking) also outlines clear principles for better Transport Plans for developments. No changes to the Local Plan are proposed.

Recommendation

6.58 The residual negative effect for SA objective 7 (Mineral resources) relates to the small areas of land likely to be sterilised by development. Where possible, Minerals Safeguarding Areas (MSAs) should be avoided, for example at Ebbsfleet Garden City, where only small parts of the MSAs are within the development boundary. Alternatively, minerals should be worked prior to development, if possible.

Council Response

6.59 In response to the above recommendation, the Council added a paragraph added in the supporting text for Policy M2 (Environmental and Amenity Protection) to clarify that development in MSAs should be avoided where possible or otherwise will be considered in accordance with policy DM 7 of the Kent Minerals and Waste Local Plan. Section 1 of the Local Plan makes clear that the adopted Kent Minerals and Waste Local Plan forms part of the statutory development plan.

Recommendation

6.60 There is a residual negative effect for SA objective 13 (Biodiversity) as, whilst the Plan may result in overall net gains in biodiversity, particular habitats could be lost or damaged as a result of development. To mitigate this, the

Council should provide specific advice on how net gain will be measured, require protection of irreplaceable habitats (such as ancient woodland) and specify that any compensatory habitat must be of a similar type, area and condition (or better, according to local and national priorities).

Council Response

6.61 In response to the above recommendation, the Council amended Policy M15 (Biodiversity and Landscape) to refer to priority 'or other irreplaceable' habitats. It was also amended to include the following text: 'In the event that development adversely affects any existing habitats, this must be replaced by compensatory habitat of a similar type, size and condition in close proximity to that which is being lost'.

Recommendation

6.62 The residual negative effect for SA objective 14 (Historic environment) relates to development of Sites of Archaeological Significance, as the location of development proposed in the Plan is unlikely to avoid these. Whilst these areas could be avoided, they cover much of the Borough and locating development elsewhere may result in a less sustainable pattern of development overall. As such, residual negative effects will remain. In order to minimise and mitigate this could include planning conditions to protect and retain archaeological features in situ, where appropriate, or to carry out detailed surveys and recordings of any archaeological finds, with an associated plan for the preservation of these and how they can be used for academic study or public information.

Council Response

6.63 In response to the above recommendation, the Council added the following supporting text for Policies M5 (Designated Heritage Assets) and M6 (Historic

Environment Strategy): 'Where appropriate, archaeological features should be protected and retained in situ, or otherwise recorded, preserved and made available as a public record'.

Recommendation

6.64 It should be noted that the SA has identified potential for development to adversely impact heritage assets, biodiversity assets, and/or source protection zones for the following policies:

- Policy D1: Central Dartford Strategy.
- Policy D3: The mix of uses in Dartford Town Centre.
- Policy D5: East of Lowfield Street Allocation.
- Policy D7: Station Surrounds/River Darent.
- Policy E1: Ebbsfleet Garden City.
- Policy E4: Ebbsfleet Central Allocation.
- Policy E5: Ebbsfleet South and West Area.
- Policy E6: Land North of Swanscombe Area.

6.65 Whilst it is recognised that environmental assets and resources are sometimes referred to in supporting text and that there are separate policies in the plan addressing these issues, our view is that the Plan could be strengthened by referring to these features within site allocation and area-specific policies themselves. This will help to ensure a consistent and clear approach to safeguarding such environmental assets and resources throughout the Plan. The reference to the Co-op façade in Policy D4 (Westgate Allocation) is a good example of this approach.

6.66 In addition, these policies could go further than safeguarding biodiversity assets, by re-iterating the requirement for biodiversity net gain and connecting ecological networks. In addition, where sites coincide with or are located close

to Biodiversity Opportunity Areas, policies could require development to improve the biodiversity of such areas.

Council Response

6.67 In response to the above recommendation, the Council advised that the strategic policies are intended to focus on the development principles and amount of development which is planned to come forward in these areas. Heritage assets, biodiversity assets and source protection zones are dealt with under Policies M5 (Designated Heritage Assets), M6 (Historic Environment Strategy), M15 (Biodiversity and Landscape) and M2 (Environmental and Amenity Protection) respectively. The Plan needs to be read as a whole and all policies will apply to development proposals.

6.68 Where there are particular issues in relation to a strategic allocation/location, these are already referred to in the policy. For example, Policy D5 (East of Lowfield Street Allocation) refers to respecting the adjacent listed buildings and conservation area, Policy D6 (Priory Centre Road Allocation) focuses heavily on River Darent improvements and Policy E6 (Land North of Swanscombe Area) refers to the need to protect and enhance important ecological habitats. Updated and detailed assessment of environmental assets/ resources will occur to inform masterplanning, which is a requirement of various policies, including at D4-D6.

6.69 In response to the recommendation regarding biodiversity net gain, ecological networks and Biodiversity Opportunity Areas, the Council highlighted that Policy M15 (Biodiversity and Landscape) sets out the requirements in relation to biodiversity net gain and connecting ecological networks. This will apply to all applicable development coming forward in the Borough.

Recommendation

6.70 Policy E4 (Ebbsfleet Central Location) states that 'health/education' facilities will be provided. It is recommended that the policy clarifies what this should include. For example, whether both primary schools and secondary schools are to be provided. Similarly, it is recommended that Policy E5 (Ebbsfleet South and West Area) or supporting text clarifies what is to be provided at the education campus at Alkerden.

Council Response

6.71 In response to the above recommendation, the Council added additional supporting text for Policies E4 (Ebbsfleet Central Location) and Policies E5 (Ebbsfleet South and West Area) in relation to school provision.

Chapter 7 Monitoring

Introduction

7.1 This chapter recommends indicators to monitor the effects of implementing the Local Plan.

7.2 Regulation 17 of the SEA Regulations requires that:

"the responsible authority shall monitor the significant environmental effects of the implementation of each plan or programme with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action" and that the environmental report should provide information on "a description of the measures envisaged concerning monitoring".

7.3 Monitoring proposals should be designed to provide information that can be used to highlight specific issues and significant effects, and which could help decision-making.

7.4 National Planning Practice Guidance states that monitoring should be focused on the significant environmental effects of implementing the Local Plan. The reason for this is to enable local planning authorities to identify unforeseen adverse effects at an early stage and to enable appropriate remedial actions.

7.5 Since effects which the SA expects to be minor may become significant and vice versa, monitoring measures have been proposed in this SA Report in relation to all of the SA objectives in the SA Framework. As the Local Plan

Review is implemented and the likely significant effects become more certain, the Council may wish to narrow down the monitoring framework to focus on those effects of the Local Plan Review likely to be significantly adverse.

7.6 A number of suggested indicators for monitoring the potential sustainability effects of implementing the Local Plan are set out below. The data used for monitoring in many cases will be provided by outside bodies, for example the Environment Agency. It is therefore recommended that the Council remains in dialogue with statutory environmental consultees and other stakeholders and works with them to agree the relevant sustainability effects to be monitored and to obtain information that is appropriate, up to date and reliable.

7.7 Relevant indicators from the monitoring framework presented in Chapter 6 (Implementation and Monitoring Chapter) of the Local Plan have been included where relevant, and can be identified by the words 'Local Plan indicator' in brackets, after the relevant bullet point.

SA objective 1: To ensure that everyone has the opportunity to live in a decent home.

- Total new homes completed in reporting year.
- 5yr Deliverable Land Supply Statement (Local Plan indicator).
- Housing Delivery Test (Local Plan indicator).
- Residential permissions and completions for the year (Local Plan indicator).
- Percentage of homes delivered on sites under 1 hectare (Local Plan indicator).
- Percentage of homes constructed within the year that are houses of 2 bedrooms or more (Local Plan indicator).
- Percentage of applicable applications that achieved 35% policy provision (Local Plan indicator).

- Percentage of dwellings in the year completed/transferred for affordable housing occupation (Local Plan indicator).
- New pitches provided in the year (Local Plan indicator).
- 5 year traveller pitch/plot supply and context (Local Plan indicator).
- Number of permitted of M4(2) and M4(3) homes within the monitoring year (Local Plan indicator).
- Number of permitted homes compliant with Nationally Described Space Standards (NDDS) (Local Plan indicator).
- Number of consented applications for self-build (Local Plan indicator).
- Residential property prices and sales.
- Size and age of housing stock.
- Homelessness.

SA objective 2: To ensure ready access to essential services and facilities for all residents.

- New F-class permissions/completions (Local Plan indicator).
- Net gain of F-class developments (Local Plan indicator).
- Number of schools that are at capacity/surplus.
- S106 contributions accumulated per annum for improvements to public transport, leisure services, education, health and community services.
- Percentage of the borough's population having access to natural greenspace within 300 metres of their home.
- Hectares of accessible green space per 1,000 population.

SA objective 3: To strengthen community cohesion.

- Development in the year resulting in the gain or loss of community facilities.
- Crime rates per 1,000 people.

SA objective 4: To improve the population's health and reduce inequalities.

- Developments on Protected Local Green Space.
- Playing pitches and Borough Open Space completed in the year on new development.
- Percentage of residents that consider their health to be good.
- Difference in levels of deprivation between the most and least deprived areas.
- Performance against relevant indices of multiple deprivation indicators.
- Obesity rates in adults and children.
- Access to doctors surgeries and average wait times for appointments.
- Residents opinion on availability of open space/leisure facilities.
- Life expectancy.
- Number of net additional local food growing opportunities, including allotment pitches.
- Development on Protected Local Green Space within the year (Local Plan indicator).
- Percentage of major developments that have delivered 30% open space provision (Local Plan indicator).

- Percentage of the borough's population having access to natural greenspace within 300 metres of their home.
- Hectares of accessible green space per 1,000 population.

SA objective 5: Facilitate a sustainable and growing economy and a vital and viable town centre.

- Number of completed residential units within the Town Centre (Local Plan indicator).
- Net gain in E-class floorspace within the Town Centre (Local Plan indicator).
- Net gain in F-class floorspace within the Town Centre (Local Plan indicator).
- Vacancy rates within town and neighbourhood centres (Local Plan indicator)
- Vacancy rates of retail premises (Local Plan indicator).
- Completed development and/or projects within the monitoring year that provided new or enhanced public realm (Local Plan indicator).
- Nomis data on number of businesses (Local Plan indicator).
- Net gain in E-class floorspace (Local Plan indicator).
- Net gain in B-class floorspace (Local Plan indicator).
- Retail appeal decisions / any retail development permitted in out of centre locations or at Bluewater.
- Levels of unemployment.
- Number of visits to the Borough.
- Amount of new employment land generated.
- Jobs per ha within different use classes.

- Employment rates.
- Employment status by resident and job type.
- Number of people claiming Jobseeker's Allowance.

SA objective 6: To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.

- Number of change of use applications in town and neighbourhood centres that result in a loss of commercial or community uses (Local Plan indicator).
- CIL 5 year delivery programme (Local Plan indicator).
- Number of applications providing/improving cycle/pedestrian pathways, in or outside of development boundaries (Local Plan indicator).
- Percentage of relevant applications where a Travel Plan is secured.
- Percentage of trips to work, school, leisure suing public transport, walking and cycling.
- Peak traffic flow.
- Travel times.
- Investment in road infrastructure.
- Car ownership.
- Public transport punctuality and efficiency.

SA objective 7: To conserve the Borough's mineral resources.

 Number of planning applications approved within a Minerals Consultation Area.

SA objective 8: To conserve the Borough's soils.

- Proportion of new dwellings built on brownfield land (Local Plan indicator).
- Net loss of agricultural land.
- Area of contaminated land remediated.

SA objective 9: To maintain and improve the quality of the Borough's waters.

- Water availability/consumption ratios.
- Ecological/chemical status of water bodies.
- Water use per household.
- Water pollution incidents recorded by the Environment Agency.
- Percentage of developments permitted including elements of SuDS (Local Plan indicator).
- Percentage of developments completed to the government's higher water standard (Local Plan indicator).

SA objective 10: To reduce air pollution and ensure improvements in air quality.

- Data from the air quality monitors within the AQMZ (Local Plan indicator).
- Strategic Transport Infrastructure Programme (STIP) annual report (Local Plan indicator).
- Fastrack usage data (Local Plan indicator).
- Percentage of trips to work, school, leisure using public transport, walking and cycling.
- Car ownership.
- Also see indicators for SA objective 6: To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.

SA objective 11: To avoid and mitigate flood risk.

- Percentage of developments permitted including elements of SuDS (Local Plan indicator).
- Number of developments refused due to flooding issues (Local Plan indicator).
- Development permitted contrary to advice by the Environment Agency on flood risk.
- Amount of housing and employment land delivered within Flood Zones 2 and 3.

SA objective 12: To minimise the Borough's contribution to climate change.

- Percentage of development completed where 19% beyond Part L of the building regulations were achieved (Local Plan indicator).
- Number of non-residential completes that achieved BREEAM Excellent (Local Plan indicator).
- Percentage of new major developments that include some form of Electric Vehicle Charging (Local Plan indicator).
- CO2 emissions per capita.
- New installed renewable energy capacity.
- Total energy consumption.
- Also see indicators for SA objective 6: To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion and SA objective 10: To reduce air pollution and ensure improvements in air quality.

SA objective 13: To conserve, connect and enhance the Borough's wildlife, habitats and species.

- Development on Protected Local Green Space within the year (Local Plan indicator).
- Percentage of major developments that have delivered 30% open space provision (Local Plan indicator).
- Percentage of applications impacting on biodiversity or habitats that have an implemented mitigation plan (Local Plan indicator).
- Condition of designated areas of high environmental value.
- Net loss/gain of designated wildlife habitats.

- Number and hectares of SSSIs.
- Percentage of Borough's SSSIs in a favourable or unfavourable condition.
- Number and hectares of Local Nature Reserves, Local Wildlife Sites, Ancient Woodland and Priority Habitats.
- Percentage of major developments delivering at least 10% Biodiversity Net Gain.
- Hectares of biodiversity habitat delivered through strategic site allocations.

SA objective 14: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.

- Developments completed at designated heritage assets (Local Plan indicator).
- Number of entries on the Heritage at Risk Register.
- Number of planning applications approved contrary to Historic England and/or Conservation Officer advice.
- Number of heritage restoration projects completed.
- Number of designated and non-designated heritage assets.
- Number of planning applications approved in Areas of Archaeological Potential and Areas of Special Character.

SA objective 15: To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.

- Percentage of consented applications that accord with design policy (Local Plan indicator).
- Landscape character appraisal and impacts.
- Percentage of development built on brownfield sites/ previously developed land.
- Hectares of green infrastructure secured through development.
- Number of landscape enhancement schemes secured.
- Delivery of public realm or open space along the river corridors (Local Plan indicator).

Chapter 8 Conclusions and Next Steps

Conclusions

8.1 The policies and allocations included in the Local Plan have been subject to a detailed appraisal against the SA objectives, which were developed at the Scoping stage of the SA process and refined in previous stages of SA. The consideration of reasonable alternatives has been built into the Local Plan preparation process and considered through the SA.

8.2 Overall, the spatial strategy generally performs well in sustainability terms, building on the adopted Local Plan by focusing development on well-connected brownfield sites within the town of Dartford, and also at Ebbsfleet Garden City, which is a long-term large-scale regeneration project in the area. The Local Plan seeks to meet the objectively assessed housing needs of the Local Plan area, and facilitate the growth of the local economy, and the delivery of supporting infrastructure.

8.3 The Local Plan has been found to have a number of positive effects on the SA Objectives, as well as some negative effects. When taken as a whole, the Plan is expected to have significant positive effects with regards to housing, access to services and services, community cohesion, economy and soils. Significant positive effects are also expected for sustainable travel, including associated implications for air quality and climate change, and biodiversity, although these are mixed with residual negative effects. Additional residual negative effects have been identified in relation to mineral resources and the historic environment.

8.4 Adverse effects are expected to arise in combination with other development nearby, particularly with regards to air pollution and climate change as a result of additional traffic from growth in surrounding authorities.

The Plan already goes a long way to mitigate some of the inevitable adverse impacts of development on these factors and further suggestions are made in Chapter 6.

8.5 There is uncertainty related to many of the effects identified, particularly the site allocations and other area-specific policies, as the effects depend on the exact nature and design of development, which will be agreed at the planning application stage. Nevertheless, the Local Plan should help to ensure that development is suitably located and well-designed.

8.6 The SA has inevitably had to make some assumptions in coming to judgements of the effects of the Plan. Our assumption with respect to effects, cumulative or otherwise, is on the basis of the intention of the Local Plan (i.e. what it is seeking to achieve). It is possible that in considering development proposals, there will often be tensions when applying different policies, and deciding where weight should apply. This highlights the importance of monitoring the potential significant effects identified once the Plan is adopted.

Next Steps

8.7 This SA Report and the accompanying Non-Technical Summary (NTS) will be available for consultation alongside the Local Plan for six weeks from February 2021.

8.8 Following consultation, the Council will consider whether to propose any modifications to the Local Plan. The Local Plan, any proposed modifications to this, other supporting and submission documents, including this SA and responses received during the consultation, will be submitted to the Secretary of State for Examination.

LUC

January 2021

Appendix A Consultation Comments

Consultation comments in relation to the SA Scoping Report and how these were addressed

Historic England

- Comment: Report adequately covers historic asset effects.
 - DBC response: None.

Environment Agency

- Comment: No comments. Section 6.19 Flood risk modelling delayed until Spring 2019.
 - DBC response: Clarified in text.
- Comment: the correct issues have been highlighted in the groundwater and contaminated land parts of the report. Environmental gains should be included as well as social economic gains.
 - DBC response: The SA Scoping Report considers environmental, social and economic issues. It is uncertain which part of the report this comment relates to, but the SA will continue to consider the possibility for social, economic and environmental gains throughout.
- Comment: Section SA4 should indicate pollution or contamination in addition to the factors set in the question on health and well- being.
 - DBC response: Text updated.

- Comment: Table A1.3 should have yes linking soils and SPZs.
 - DBC response: Updated.

Natural England

Comment: Generally good coverage of plans, policies and programmes. Following should be used as relevant; GI strategies, Biodiversity plans, Rights of Way improvement plans, shoreline management plans, river basin management plans, AONB management plans.

Comment: Reference to Marine and coastal Access Act (2009) should be included. Should consider including EA Water for Life and livelihoods 2015. Part 1 Thames River Basin District River Basin Management Plan DEFRA, EA Estuary Edges: Ecological Design Advice. (Links provided).

- DBC response: Marine and Coastal Act 2009 and Thames River Basin management Plan have been added to the review of plans and programmes. Other suggested strategies do not exist or are not relevant to Dartford. The Estuary Edges: Ecological Design Advice is a guidance document, rather than a plan or policy document, therefore it has not been included. However, the Council will have regard to the document when preparing the Local Plan policies.
- Comment: Welcomed that the Local Plan will address the importance of accessibility, quality and inclusion of new green spaces. A further comment could be added to refer to connecting people to the environment.
 - DBC response: Reference inserted.
- Comment: Happy to see biodiversity opportunities highlighted. More comprehensive review of vulnerabilities of designated sites can be found on the NE designated site system (link supplied).
 - DBC response: Added reference and website link to Biodiversity baseline.
- Comment: Lack of coverage of enhancement or impacts on recreational resources and assets. Add supporting question to objective SA2 or 4: 'Does the plan impact on the quality and extent of existing recreational

assets, including formal or informal paths?'. Improving people's access to nature should be included as key issue.

- DBC response: Question on impact on recreational assets added to SA objective 2. Have included access to nature in the evolution without a plan section, in regard the opportunity afforded by the Plan. An appraisal question in SA13 also identifies the Preferred Policy approach to managing opportunities for people to connect to nature.
- Comment: In 'ecological connectivity' add 'Ensure current ecological networks are not compromised, and future improvements in habitat connectivity are not prejudiced'.
 - DBC response: Included in SA13.
- Comment: Satisfied that the SEA Regulation requirements cover Natural England's key interests. Advise use of Green Infrastructure standard as an indicator such as Accessible natural Greenspace Standard.
 - DBC response: See response on SEA indicators below.
- Comment: Chapter 2: Highlight a possible connection between open space provision and the health of the population – this could support future open space provision in areas where health deprivation and deficit of open space. Objective SA4 supporting question in the SA Framework could also consider quality of existing sites. In line with the question, reference could be added to improvement or enhancement in SA4.
 - DBC response: The potential for connection between open space and particularly mental health of population has been inserted referencing research findings from Kent Nature Partnership. 'Enhancing' added to SA 4 questions. The existing text assesses if the plan provides for a variety of open spaces and recreation facilities. An assessment of the relative quality of existing sites would be difficult and may not indicate the extent of potential for positive health outcomes.
- Comment: Chapter 5: Generally happy but advised to include River Basin management plans. Chapter 11: SA8 question in the Framework should note that some brownfield sites can have significant biodiversity value, particularly for invertebrates, and this should be a consideration in individual site appraisals.

- DBC response: Thames River Basin Management Plan added. SA8 objective is to conserve soils, this does not seem to be an applicable place to comment on brownfield biodiversity value. A question focused on brownfield site biodiversity value has been inserted in SA13. We do not have the evidence available to assess biodiversity value of brownfield sites in terms of individual site appraisals. We would suggest that this is recognised in the Local Plan development management policies to ensure biodiversity of brownfield sites is considered at the planning application stage.
- Comment: Chapter 7: the main issues have been identified. Advised to use terminology 'net gain' in support of Government's 25 Year Environment Plan and which is to be achieved via the development process. Consider including an appraisal question for objective SA13 to test Plan's delivery of 'net gain'. The aquatic environment should be considered. Reference must be made to the Marine and coastal Access Act (2009) and the Swanscombe Marine Conservation Zone. Electronic link provided to information on the site.
 - DBC response: Reference made to 'net gain' in overview of 25-year Environment Plan and question added to SA13. Swanscombe Marine Conservation Area and 2009 Marine and Coastal Access Act referenced.
- Comment: Monitoring indicators It is important that monitoring indicators relate to the effects of the plan itself not general environmental baseline metrics which will be driven by factors outside of the plan. A number of suggestions have been listed which may be suitable relating to the outcome of development management decisions and an information sheet on sources of local plan evidence on the natural environment has been provided.
 - DBC response: As the contents of the Local Plan and likely sustainability effects are currently unknown, it is not appropriate to provide details on suggested monitoring indicators at this time. A reference to the SA providing specific LP performance indicators has been added to Chapter 12. The suggestions provided will be considered during the drafting of the SA.

Consultation comments received in relation to the Preferred Options SA Report for the Local Plan and how they have been addressed

Highways England

- Comment: In terms of your sustainability appraisal, it is worth stating that a growing concern to us is air quality and the impact of development traffic contributing to emissions from traffic on the SRN. We shall be paying particular attention to air quality matters in future and stress the need for appropriate monitoring.
 - Response: The SA Framework for the Dartford Local Plan contains a set of 15 SA objectives. SA objective 10 looks at the effect the Local Plan is likely to have on reducing air pollution and improving air quality. The proposed vision and objectives, 'Main Alternatives' for the Plan and options for policy approaches contained within the Preferred Options Local Plan were each appraised against this SA objective. Any future policies and site options will also be appraised against this objective.

Natural England

- Comment: Based upon the indicative development proposals for the Swanscombe Peninsula on page 66 of the preferred options consultation, the proposed development footprint appears to result in the direct loss of priority habitat. Given the loss of priority habitat, the major positive benefit for biodiversity concluded through the Sustainability Appraisal Objective 13 does not appear to reflect the indicator questions to inform Objective 13, particularly:
 - Does the plan ensure that the biodiversity of brownfield sites is identified, protected and enhanced?

- Does the plan conserve and enhance designated and undesignated assets within and outside the borough...?
- Does the plan ensure ecological networks are not compromised...?

The detailed matrices for the preferred option 5b for Main Question 5 in the Sustainability Appraisal for the Biodiversity Objective 13 states that '...the Swanscombe Peninsula does not contain any designated biodiversity assets. Therefore option 5b would likely enhance biodiversity in the area whilst also contributing to the objectives of the Biodiversity Opportunity Area'. Given the priority habitats on the Peninsula, which also include reedbeds and marsh in addition to the open mosaic habitat, any development allocation proposals within the Local Plan should ensure that the 'avoid, mitigate, compensate' hierarchy is followed and we consider the local plan is the place to ensure that alternatives are fully tested to ensure that development with the least environmental impact proceeds to allocation.

Response: The indicator questions are used as a guide only and we have not addressed each one in turn. The appraisal matrix for the Swanscombe Peninsula area acknowledges the presence of marshland, which includes priority habitats for mudflats, coastal saltmarsh, and coastal and floodplain grazing marsh. In addition, the matrix acknowledges the presence of a designated biodiversity assets adjacent to the area, namely the Swanscombe Marine Conservation Zone. Reference is also made to the Biodiversity Opportunity Area contained within the site.

The questions will be updated to refer specifically to priority habitats and the implications of the three strategic site options (and any additional site options identified) on priority habitats will be explicitly considered.

Historic England

Comment: Historic England has no specific , detailed comments to make on the Sustainability Appraisal which is a thorough and comprehensive piece of work. Response: Noted.

Environment Agency

Comment: Strategic Objective 3, Page 23, Section 4.20

Strategic objective 3 (continued regeneration of the northern urban area through the re-use of brownfield land), as worded, may have a negative impact on SA11: Flood Risk. This is because it specifically identifies a flood risk area for development without having considered the sequential test. We suggest that the objective could be to promote redevelopment of brownfield land generally, rather than the northern urban area specifically. Other strategic objectives do not refer to a particular geographic area.

- Response: Noted. This will be acknowledged in the next iteration of SA. The last two sentences of this comment is for consideration by the Council as plan-makers, rather than the SA.
- Comment: Strategic Objective 5, Page 24, Section 4.31

Large parts of Dartford Town Centre are in Flood Zone 2 and 3, Strategic objective 5 could impact negatively on strategic objective 11 if the sequential test is not considered early on in development proposals.

- Response: This comment is primarily for consideration by the Council as plan-makers, rather than the SA. The strategic objectives have now been updated, as has the accompanying SA assessment.
- Comment: Strategic Objective 7, Page 24, Section 4.34

Strategic objective 7 refers to 'improvements to the river and surrounds' but does not cite SA11: Flood Risk as a potential beneficiary. We would like to see flood defence infrastructure integrated into a holistic plan for the river frontages (Darent and Thames). If this were done, strategic objective 7 would also have a positive impact on SA11: Flood Risk.

- Response: Noted. This comment is for consideration by the Council as plan-makers, rather than the SA.
- Comment: Page 26, Section 4.47

As referenced in our comments on Section 4.20, a very strong steer directing development to brownfield land would be detrimental to SA11: Flood Risk because it may be used to justify inappropriate development on brownfield land in the floodplain.

- Response: Noted. The SA recognises potential negative effects as a result of focusing development on brownfield land, although effects were deemed to be minor, particularly in comparison to options for development on greenfield land.
- Comment: Page 27, Section 4.52

Is an erroneous with regard to flood risk because new development on greenfield land would be required to attenuate runoff in order not to increase flood risk. However, it would be correct to say that development on brownfield land offers an opportunity to reduce runoff below the current rate/volume.

Response: The SA has been carried out on a precautionary basis, therefore highlighting potential significant effects. In addition, these options have been assessed 'policy off', i.e. not making assumptions based on existing policy or making assumptions about detailed policy requirements of the emerging plan. Nevertheless the point is noted and we recommend the Council includes a policy requirement for development not to increase surface water runoff above greenfield rates. (This is now covered by Policy M4: Flood Risk and Riverside Design.)

Comment: Page 30, Section 4.60

We disagree that option 2B would necessarily have a significant negative effect on flood risk. If the areas selected for redevelopment were chosen with flood risk as a consideration, and if developments were designed appropriately (e.g. replacing existing ground floor flats with ground floor commercial and residential above) it could actually reduce flood risk.

 Response: The SA has been carried out on a precautionary basis, therefore highlighting potential significant effects. Potential mitigation and design are not taken into account as there is substantial uncertainty regarding these. This ensures all options are considered on a level playing field.

Comment: Page 31, Section 4.66

Option 3C has the potential to benefit SA11: Flood Risk if new green spaces were designated in corridors alongside rivers, as well designed flood defence infrastructure is generally compatible with public open space and the land would thereby be safeguarded for future defence improvements.

- Response: The SA recognises the potential positive effects of this option (minor positive effects are recorded for SA 11: flood risk).
- Comment: Page 39, Section 4.99

Option B would have a more negative impact on flood risk than option A as the latter could include less vulnerable uses which could be situated at ground floor level. A development comprised entirely of residential accommodation would have to have a raised ground floor leading to an inactive frontage and less freeboard for residential units above flood levels.

- Response: The SA considers that both options could result in significant negative uncertain effects. The assessment text will be updated to recognise this potential difference between the two options.
- Comment: Page 40, Section 4.104

Any proposals for regeneration in this area should take into consideration land that needs to be safeguarded for a Thames Barrier intervention as part of the Thames Estuary 2100 plan.

Response: Noted. This comment is for consideration by the Council as plan-makers, rather than the SA. However, the SA can be updated to acknowledge the potential for a future Thames Barrier at this location.

Comment: Page 43, Section 4.124

"Development in northern urban areas, including much of the priority regeneration centres would fall within high Flood risk areas, which means that an uncertain significant negative effect is recorded, as these areas also benefit from flood defences." Although some of these areas do currently benefit from flood defences, future defence works will be required to ensure that the level of protection can be sustained. This is important to note in all areas that currently benefit from flood defences.

- Response: Noted. This is why uncertainty has been recorded. This will be made clear in future iterations of the SA. This comment is also for consideration by the Council as plan-makers, rather than the SA.
- Comment: Page 48, Section 4.152

Although greenfield development in a flood risk area would almost always have a significant negative impact on SA11: Flood Risk, redevelopment may only have a minor negative impact as the continued need to provide flood defences could be partially offset by improving the design of buildings to make them more flood resilient.

- Response: The SA has been carried out on a precautionary basis, therefore highlighting potential significant effects. Potential mitigation and design are not taken into account as there is substantial uncertainty regarding these. This ensures all options are considered on a level playing field. With respect to building design, this comment is for also consideration by the Council as plan-makers, rather than the SA.
- Comment: Page 48, Section 4.155

"Continued consideration should be given to the potential for, and management of, flood risk within Dartford Town Centre." We agree with this recommendation.

- Response: Noted.
- Comment: Page 49, Section 4.157

"It is recognised that there are potential negative effects in terms of flood risk from developing in Dartford town centre, but the council considers that the wider regeneration benefits of transforming the town centre will outweigh this." It will be important that any development proposals consider flood risk early on to ensure that the town centre is developed in a way that will mean flood risk is not increased and development is resilient for the future.

- Response: Noted. This comment is for consideration by the Council as plan-makers, rather than the SA.
- Comment: Page 50, Section 4.167

We agree with the statement "Going forward, it would be beneficial for this preferred policy approach to ensure that flood defence measures are in place at Ebbsfleet Central and Swanscombe in order to reduce Flood Risk." It would also be good to have a riverside strategy in place to ensure that flood defence measures are considered alongside, access to the river etc.

 Response: Noted. This comment is also for consideration by the Council as plan-makers, rather than the SA.

Comment: Page 68, SA Objective 11

Reference could be made to Riverside Strategies.

- Response: Noted. This will be included as relevant in the next iteration of SA.
- Comment: Page 112, Figure A2 4

There have been some updates to the flood map, we would refer you to the following link for the most up to date information https://flood-map-for-planning.service.gov.uk/

- Response: This will be updated in the next iteration of SA.
- Comment: Page 177 SA 11 for Littlebrook Power Station

Plans for a possible future Thames Barrier should be referenced here.

- Response: Consideration of safeguarding land for a possible future Thames Barrier is a consideration for the Council as plan-makers, rather than the SA. However, the SA can be updated to acknowledge the potential for a future Thames Barrier at this location.
- Comment: Page 213 SA 11

There is a typo and it should read TE2100 and not TF2100.

Response: Noted. This will be updated in the next iteration of SA.

Comment: Page 10, SA13

Does the Plan conserve and enhance designated and undesignated ecological assets within and outside the Borough, including identification of opportunities for improvements and conservation, connection and enhancement of ecological assets and achievement of biodiversity net gain?

It is not clear that a net gain is achievable within this plan, as even at a strategic level, the biodiversity assets within development sites is not factored in. Primarily because they are undesignated. The impacts of increased population pressures are therefore not necessarily considered either.

Does the plan ensure ecological networks are not compromised, and future improvements in habitat connectivity are not prejudiced, taking into account the impact of climate change?

The plan is aiming to improve habitat connectivity, but it is not clear how it will achieve it in practice.

Does the Plan ensure that the biodiversity value of brownfield sites is identified, protected and enhanced?

It does identify that they exist, but does not identify them across the borough, evaluate them or demonstrate that they will be protected and enhanced.

Does the Plan provide and manage opportunities for people to come into contact with resilient wildlife places whilst encouraging respect for and raising awareness of the sensitivity of such locations?

There is potential to achieve this, but it does not provide a specific mechanism to deliver this.

Response: It is noted that these objectives and comments relate to the plan as a whole. A cumulative effects assessment will be undertaken at the next stage of SA, once the Council has prepared a draft plan.

See response to Natural England's comments.

Air pollution is assessed via SA 10: air pollution. There is a degree of crossover between all objectives but they are assessed separately for clarity.

Noted. This comment is for consideration by the Council as planmakers, rather than the SA.

Noted. This comment is for consideration by the Council as planmakers, rather than the SA. Evaluating brownfield sites across the borough is outside the scope of SA.

Noted. This comment is for consideration by the Council as planmakers, rather than the SA.

Comment: Option 1 As stated elsewhere in the appraisal, Brownfield sites can be rich in wildlife. It would be useful to differentiate between brownfield sites that are majority built on with buildings/artificial surfaces; and those that are largely 'green' holding significant wildlife value.

Otherwise, options concentrating on brownfield sites could be negative for SA13, Biodiversity. Therefore, we do not agree with your conclusions in paragraph 4.53 unless there are sufficient safeguards.

If the Council seeks to take forward its preferred option it needs to properly appraise all brownfield sites for their ecology to understand what capacity they have for accommodating development that will contribute to Biodiversity Net Gain.

Option 3 It is not clear how 3B will deliver a Biodiversity Net Gain through the plan process.

Option 5B is supported if it identifies, conserves and enhances the ecological resources of the Swanscombe Peninsula.

We have no objection to Option 6A, but is so far unclear how this will significantly contribute to enhanced biodiversity network.

Preferred Policy Approach

Ebbsfleet Garden City

The council should factor in that the Ebbsfleet Garden City area contains a wealth of biodiversity assets including much of the Swanscombe

Peninsula, River Ebbsfleet corridor and areas of grassland and old quarries. Many of these sites are already rich in wildlife. There is a significant development pressure for much of this area, and to date no information has been provided that clarifies how no net loss of biodiversity will be achieved. There is certainly a high risk of no net gain for Biodiversity.

Therefore, the assumption of a likely positive outcome for Ebbsfleet Garden City is questionable, unless evidence can be provided of how this can be achieved. Some local authorities in Kent are aiming for 20% Biodiversity Net gain. Due to the high risk of much of the brownfield development leading to a net loss, or no net gain for Biodiversity, you may want to look more closely at this aspect of the Local Plan, and how sufficient land can be provided that caters for both development proposals, and biodiversity net gain.

Response: Negative effects are recorded against SA 13 for all options, in order to recognise that brownfield sites may also have biodiversity value, which could be lost as a result of development. Para 4.53 explains that more dispersed growth is more likely to have significant negative effects, based on the locations of ancient woodland and nationally designated biodiversity sites. It does not suggest the options would have no effects or positive effects. (Note that the definition of brownfield sites in the NPPF excludes 'land that was previously developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape'.)

It is beyond the scope of the SA to carry out a detailed ecological appraisal of all brownfield sites.

The SA does not state that Option 3B will deliver a biodiversity net gain. Option 3 is expected to have a minor positive effect for SA 13: biodiversity as it is expected to maintain local greenspace.

Support for Option 5B is for the attention of the Council.

The SA does not state that Option 6A will significantly contribute to an enhanced biodiversity network.

The SA recognises biodiversity assets in the area, in line with the SA Framework. As stated in the assessment, the significant positive effect reflects the fact that the policy approach includes creation of an ecological park, incorporation of waterscapes, open space, green infrastructure and states that development should be unified with the existing environment. The negative effect recorded against SA 13 for this policy approach reflects the possibility of residual harm to biodiversity. The comment regarding revisiting this aspect of the Local Plan to ensure biodiversity net gain is for consideration by the Council as plan-makers, which will then be assessed through the SA process.

Comment: Water Resources

Pages 102 and 104

The Kent Environmental Strategy (KES), quoted on page 102 and page 104, is out of date in setting a target water consumption of 140 litres per head per day, and quoting current consumption as 154 litres compared to a national average of 141 litres. Those figures are appropriate to either 2012-13 or 2013-14, since when consumption has reduced due to a programme of compulsory metering and water efficiency measures. In 2018-19, Kent and Medway consumption averaged 137 litres per head per day, already below the KES target. The national average that year (England only) was 143 litres.

- Response: This updated information will be included in the next iteration of SA.
- Comment: Page 218

On page 218 in section H, under the objective SA 1: Housing, we would welcome greater clarity on what is meant by "near zero standards in national building regulations." This presumably relates to carbon emissions. For water efficiency there is a national standard and an optional higher standard for new domestic developments, and we would be concerned if only the national standard were adopted. As the area is one of serious water stress, we would expect the optional higher standard to be adopted, designing for a consumption of 110 litres per person per day including external use. Some authorities are more ambitious than this, and although most of Dartford is served by Thames Water, not far away

Southern Water is planning according to a target consumption of 100 litres per person per day for all dwellings by 2040. I would hope that the household water efficiency standard would be supported by a requirement for non-residential developments to achieve BREEAM standards of water efficiency of Very Good or Excellent, at least for larger developments.

 Response: Please see paragraph H7 in the Preferred Options report, to which this assessment relates. This relates to energy use and carbon emissions.

This comment relates largely to the plan itself and is therefore for consideration by the Council as plan-makers. Paragraph H5 of the options report states that development will be required to meet the water efficiency level of 110l per person per day.

Bericote Properties Ltd

Comment: In relation to Littlebrook Power Station proposed policy:

We note that a maximum parameter of 88,000 sqm of a range of Use Class B floorspace has been proposed for the strategic allocation, which we understand does not include the permitted 12.84 hectares of Phase 1. The Sustainability Appraisal of the Local Plan Preferred Options consultation does not appear to provide an indication as to how the 'up to 88,000 sqm' of floorspace has been arrived at, so we can only assume that is a hangover from the historic outline permission granted to redevelop the power station. Clearly, by increasing the site to include Phase 1, and extending its area to 46 Hectares, 88,000 sqm would present a coverage of less than 20%, and would represent a gross underdevelopment contrary to the NPPF. Even if it applied to the area covered by Phases 2 and 3, it would reflect a very low site coverage of 26%.

 Response: Littlebrook Power Station has been granted permission for employment use and is therefore a commitment. It forms an extension to The Bridge Identified Employment Area (set out in Policy M21: Identified Employment Areas of the Local Plan).
Cooper Estates

Comment: It is noted at paragraph A17 of the consultation document that: "A concept of spreading growth across the Borough was evaluated as a technical alternative option via the formal Sustainability Appraisal process; but is not considered by the Council consistent with objectives, feasible or sustainable development for Dartford Borough. It has therefore not been pursued and is not put forward as a specific proposal feature of public consultation."

Spreading growth generally across the borough is not a principle which we advocate. What is suggested is some small scale releases of Green Belt land in highly sustainable locations, benefiting from good public transport, (particularly rail), where these settlements have begun to decline in terms of population, where populations are aging and there has been a lack of new development and a lack of affordable housing provision over recent years due to the restraint policies of the previous plan.

This does not appear to have been considered. The plan and the supporting Sustainability Appraisal are deficient in this regard. The options assessed are too narrow i.e. 1A, is simply to use all brownfield land regardless of location, 1B, to use brownfield land in sustainable locations ignoring all else and 1C, spread development across the borough. These options are not sufficiently sophisticated. Option 1B will clearly appear as most appropriate and sustainable if tested solely against 1A and 1C.

It is our submission that a more subtle variation of Option 1B is required, taking account of the needs and potential of some settlements south of the A2, in particular Longfield. This would deliver the key benefits of 1B whilst also protecting and supporting some smaller settlements to ensure that they remain vibrant and vital.

 Response: The Council does not consider there to be exceptional circumstances for releasing land the Green Belt and therefore this is not considered to be a reasonable alternative.

Kitewood

Comment: As indicated in the response to question 1, Kitewood support certain of the principles in the approach to the pattern of development and Green Belt in the Borough; however, they do not support the Council's lack of willingness to consider the potential for development in sustainable locations in the southern rural area. The Council's recent SHLAA appears to conclude that all greenfield site designated Green Belt are not sustainably located and it is not clear why the Green Belt designation automatically renders the location unsuitable. This could be assessed further in the context of the need to provide a certain proportion of housing development to meet the OAN in the southern rural part which is a distinctive housing market area. The Council should then identify those larger settlements within the southern rural area - an exercise that has already been done through the sustainability appraisal where the potential for small scale housing growth could take place to support existing services. The largest villages which have such facilities include Wilmington - with three secondary schools; two primary schools and a further education institution at Kent College which serves the wider area. With a population of over 4,000 residents and good bus links to Dartford, Erith and Swanley it would be logical to consider the capacity for further limited growth as part of a strategy to provide a relatively small proportion of overall housing needs in the southern rural area and offer the opportunity to promote sustainable patters of travel to the existing amenities. This could include a limited review of Green Belt boundaries around the largest settlements. Taking Wilmington as an example, a case for more housing exists because, inter alia, the present child population is insufficient to sustain Wilmington Primary School and it is dependent upon attracting admissions from elsewhere in the Borough. Dependence on attracting admission from elsewhere is not a sustainable approach because of the implicit travel implications and the impact on local roads. Housing allocations in Wilmington are therefore necessary to promote sustainable travel patterns and sustain Wilmington Primary school. Whilst Kitewood note the intention within the preferred approach of 'no strategic release of Green Belt land' it is considered that a targeted review of Green Belt boundaries around certain larger settlements need not result in a 'strategic' amendment of Green Belt. It is also the case that the Local Plan

ought to consider whether the Green Belt boundaries in the Local Plan should endure beyond the Plan period. Notwithstanding the Government requirements for certain policies of the Local Plan to be reviewed every five years, the strategic element relating to the long term defensibility of the Green Belt should result in the Council considering the potential for safeguarded land to be removed from the Green Belt through this Local Plan process.

 Response: The Council does not consider there to be exceptional circumstances for releasing land from the Green Belt and therefore this is not considered to be a reasonable alternative.

South Darenth Farms and Cold Store Company Ltd

Comment: Paragraphs A15 to A17 of the New Local Plan: Preferred Options set out the Council's approach to the Green Belt.

We note that the area of the Borough south of Dartford and the A2 is for the most part within the Metropolitan Green Belt. The Green Belt here encloses a number of settlements, and these are severely constrained by tightly drawn Green Belt boundaries.

Paragraph A16 suggests that only small-scale development on non-Green Belt land which would meet 'local needs' is acceptable in these settlements, and that new development would have to demonstrate its compliance with Green Belt policy. Paragraph A17 specifically states that allowing a less restrictive and more balanced growth across the Borough would not be 'feasible or sustainable' form of development.

This highly restrictive approach ignores the sustainability of a number of settlements to the south of Dartford which are well served by public transport, but which lie within the Metropolitan Green Belt. These settlements are capable of accommodating sustainable growth in a way that would help to maintain their vibrancy but are largely ignored in the Preferred Options Plan.

We also note that whilst the Preferred Options document states that a more balanced approach to development that would see some Green Belt release has been considered, it has not been appraised through the Sustainability Appraisal. In addition, DBC has not undertaken a Green Belt Review to inform the New Local Plan.

Therefore, on the basis of DBC's approach to Green Belt land, we do not support the Council's approach to its pattern of development, as set out in Preferred Policies Approach A.

 Response: The Council does not consider there to be exceptional circumstances for releasing land from the Green Belt and therefore this is not considered to be a reasonable alternative.

London Resort Company Holdings

Comment: The evidence supporting the London resort will address the environmental matters identified in the Sustainability Appraisal.

1. Housing – the Resort scheme will include 500 dwellings as operational housing. This provides a contribution to the Borough's housing provision.

2. Services & Facilities – the evidence from global parks elsewhere reveal the powerful link between the Resort and the local area – businesses, residents, community groups and so on. The scheme will have a significant positive effect.

3. Community Cohesion – the appraisal conclusions are completely wrong. The scheme is masterplanned to provide connections for the community, services and employment for local people, improved transport connections for local people – it will have a significant positive effect.

4. Health & Inequalities – employment opportunities for local people able to access the site conveniently, enjoy the revitalised habitats, new walking & cycling routes, access to better transport and enjoy the significant local expenditure from the scheme. Issues around noise and air quality will be addressed through the assessment and process and mitigation identified.

5. Economy – the scale of economic dividend experienced by comparable facilities will assist in demonstrating effects for the local area, alongside the bespoke assessment work.

6. Sustainable Travel – the transport strategy for the Resort will outline the multi-modal travel proposals.

7. Mineral Resources – detailed information on the status of the mineral provision on site will be provided.

8. Soils – the remediation of contaminated land is a considerable benefit and the opportunity to invest in ways to enhance some of the existing marshes is significant.

9. Water Quality – detailed information about the water courses and their condition will be provided.

10. Air Pollution – detailed information on the effects based on the travel strategy will be provided.

11. Flood Risk – the Resort will demonstrate the measured being adopted to reflect the flood risk.

12. Climate Change – the Resort aims to operate to high standards of sustainability across its use of energy, approach to waste, modal split of visitors, integrated design and operational initiatives.

13. Biodiversity – the opportunity to enhance the marshes and provide significant biodiversity opportunities within the Resort will be shown through the emerging masterplan.

14. Historic Environment – the Resort is embracing the Peninsula's unique heritage and will work with Historic England and Kent CC Heritage on a sustainable strategy to showcase the area's history.

15. Landscape – the landscaping around and within the Resort will represent a very significant part of the scheme's "feel" and will represent an enhancement on the existing situation.

Response: Note that the SA appraised the strategic options identified by the Council, in the level of detail presented in the Options report, and does not take into account masterplan detail as this is subject to its own planning procedures through the development management process and could be subject to change. Similarly, the SA does not make assumptions regarding mitigation measures that will be implemented at the options stage. This approach ensures that all options are assessed at the same level of detail and on the basis of similar assumptions. The options appraisal is designed to appraise the principle of development at different locations, rather than detailed development proposals. Mitigation is taken into account in the development and appraisal of policies in the Local Plan.

As set out in the appraisal matrix for the Swanscombe Peninsula area, the entertainment resort is likely to serve a national or international audience, rather than being a local attraction and may therefore not service local people. It is also likely that the resort will cause disruption to local residents through an increase in traffic congestion. The creation of employment opportunities for local people is acknowledged against SA objective 5 (Economy).

The creation of employment opportunities for local people is acknowledged against SA objective 5 (Economy) where a significant positive effect is given. With regard to SA objective 4 (Health and inequalities), a mixed minor positive and significant negative effect is likely. The development of the resort would result in the remediation of contaminated land and provide residents with a place to enjoy, with positive effects against this objective. However, the resort is more likely to serve a national or international audience rather than a local audience, at the same time as generating noise, light pollution and potentially vibrations, with adverse effects on residential amenity.

With regard to points 1, 2, 3 and 9, the Council has advised that there is substantial uncertainty relating to the exact nature and timing of development proposed as part of the London Resort. Therefore, it is not possible at this stage to make any assumptions about what housing, services and facilities would be likely to be delivered through the London Resort development proposals for the purposes of the SA.

With regard to points 5, 6 and 7, the SA at this stage appraises the options set out within the Preferred Options Local Plan and does not take into consideration any assessment work or further information provided by the London Resort Company.

With regard to point 8, the remediation of contaminated land is acknowledged in the SA matrix for the Swanscombe Peninsula area.

With regard to points 9, 10, 11, 12, 13 and 14, the SA at this stage appraises the options set out within the Preferred Options Local Plan and does not take into consideration mitigation measures proposed by the London Resort Company, in addition to any strategies.

Although it is noted that the landscaping will represent a significant part of the scheme's feel, development of a resort with features such as roller coasters would have an adverse effect on the landscape. The effect has been recorded as uncertain because it is acknowledged that the actual effect will depend on the final design, scale and layout of the development.

Note that in previous iterations of the SA, a number of relevant EU Directives were included. These are no longer applicable since the UK left the EU in 2020 and the transition period ended as of 1st January 2021, although relevant UK legislation and policy relating to these is included in the national policy sections, as relevant.

Population, Health and Wellbeing

Policy Context

International

United Nations Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the 'Aarhus Convention') (1998): Establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective.

United Nations Declaration on Sustainable Development (Johannesburg Declaration) (2002): Sets broad framework for international sustainable development, including building a humane, equitable and caring global society aware of the need for human dignity for all, renewable energy and energy efficiency, sustainable consumption and production and resource efficiency.

National

National Planning Policy Framework (NPPF) [See reference 8] contains the following:

- The NPPF promotes healthy, inclusive and safe places which; promote social integration, are safe and accessible and enable and support healthy lifestyles.
- The NPPF seeks to take account of and support the delivery of local strategies to improve health, social and cultural wellbeing for all sections of the community.
- Plans should "contain policies to optimise the use of land in their area and meet as much of the identified need for housing as possible". To determine the minimum number of homes needed strategic policies should be informed by a local housing need assessment.
- Access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and wellbeing of communities.
- The NPPF states "good design is a key aspect of sustainable development" and requires development to add to the overall quality of the area over its lifetime. The importance of good architecture and appropriate landscaping to reinforce local distinctiveness, raise the standard more generally in the area and address the connections between people and places is emphasised.
- The NPPF promotes the retention and enhancement of local services and community facilities in villages, such as local shops, meeting places, sports, cultural venues and places of worship.
- Ensure that developments create safe and accessible environments where crime and disorder, and fear of crime, do not undermine quality of life or community cohesion.
- There is a need to take a "proactive, positive and collaborative approach" to bring forward development that will "widen choice in education", including sufficient choice of school places.

- Health and wellbeing should be considered in local plans. They should promote healthy lifestyles, social and cultural wellbeing and ensure access by all sections of the community is promoted.
- Paragraph 72 states that "The supply of large numbers of new homes can often be best achieved through planning for larger scale development, such as new settlements or significant extensions to existing villages and towns, provided they are well located and designed and supported by the necessary infrastructure and facilities".

National Planning Practice Guidance (PPG) [See reference 9] contains the following:

The design and use of the built and natural environments, including green infrastructure are major determinants of health and wellbeing. Planning and health need to be considered together in two ways: in terms of creating environments that support and encourage healthy lifestyles, and in terms of identifying and securing the facilities needed for primary, secondary and tertiary care, and the wider health and care system (taking into account the changing needs of the population.

Select Committee on Public Service and Demographic Change report Ready for Ageing? [See reference 10]: warns that society is underprepared for the ageing population. The report states "longer lives can be a great benefit, but there has been a collective failure to address the implications and without urgent action this great boon could turn into a series of miserable crises". The report highlights the under provision of specialist housing for older people and the need to plan for the housing needs of the older population as well as younger people.

Fair Society, Healthy Lives [See reference 11]: investigated health inequalities in England and the actions needed in order to tackle them. Subsequently, a supplementary report was prepared providing additional evidence relating to spatial planning and health on the basis that there is "overwhelming evidence that health and environmental inequalities are inexorably linked and that poor environments contribute significantly to poor health and health inequalities".

Planning Policy for Traveller Sites [See reference 12]: Sets out the Government's planning policy for traveller sites, replacing the older version published in March 2012. The Government's overarching aim is to ensure fair and equal treatment for travellers, in a way that facilitates the traditional and nomadic way of life of travellers while respecting the interests of the settled community.

Housing White Paper 2017 (Fixing our broken housing market) [See

reference 13]: Sets out ways to address the shortfall in affordable homes and boost housing supply. The White Paper focuses on the following:

- Planning for the right homes in the right places Higher densities in appropriate areas, protecting the Green Belt while making more land available for housing by maximising the contribution from brownfield and surplus public land, regenerating estates, releasing more small and medium-sized sites, allowing rural communities to grow and making it easier to build new settlements.
- Building homes faster Improved speed of planning cases, ensuring infrastructure is provided and supporting developers to build out more quickly.
- Diversifying the Market Backing small and medium-sized house builders, custom-build, institutional investors, new contractors, housing associations.
- Helping people now supporting home ownership and providing affordable housing for all types of people, including the most vulnerable.

Laying the foundations: a housing strategy for England [See reference 14]: Aims to provide support to deliver new homes and improve social mobility.

Healthy Lives, Healthy People: Our strategy for public health in England [See reference 15]: Sets out how our approach to public health challenges will:

Protect the population from health threats – led by central government, with a strong system to the frontline.

- Empower local leadership and encourage wide responsibility across society to improve everyone's health and wellbeing and tackle the wider factors that influence it.
- Focus on key outcomes, doing what works to deliver them, with transparency of outcomes to enable accountability through a proposed new public health outcomes framework.
- Reflect the Government's core values of freedom, fairness and responsibility by strengthening self-esteem, confidence and personal responsibility; positively promoting healthy behaviours and lifestyles; and adapting the environment to make healthy choices easier.
- Balance the freedoms of individuals and organisations with the need to avoid harm to others, use a 'ladder' of interventions to determine the least intrusive approach necessary to achieve the desired effect and aim to make voluntary approaches work before resorting to regulation.

Public Health England Strategy 2020-25 [See reference 16]: Identifies Public Health England's priorities upon which to focus over this five-year period to protect people and help people to live longer in good health.

A Green Future: Our 25 Year Plan to Improve the Environment [See

reference 17]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to this chapter are: using and managing land sustainably; and connecting people with the environment to improve health and wellbeing. Actions that will be taken as part of these two key areas are as follows:

- Using and managing land sustainably:
 - Embed an 'environmental net gain' principle for development, including housing and infrastructure.
- Connecting people with the environment to improve health and wellbeing:
 - Help people improve their health and wellbeing by using green spaces including through mental health services.

- Encourage children to be close to nature, in and out of school, with particular focus on disadvantaged areas.
- 'Green' our towns and cities by creating green infrastructure and planting one million urban trees.
- Make 2019 a year of action for the environment, working with Step Up To Serve and other partners to help children and young people from all backgrounds to engage with nature and improve the environment.

Sub-national

Kent and Medway Growth and Infrastructure Framework (GIF) 2018 update [See reference 18]: Provides a view of emerging development and infrastructure requirements to support growth across Kent and Medway. Some of the main sustainability issues for Dartford itself are set out:

- There is an expected increase of 59% in the size of the Borough (households) up to 2031.
- Dartford is a net importer of labour as more people travel to work from outside than commute out of the Borough.

The document also sets out the main challenges for North Kent, many of which are relevant for Dartford and include:

- Some of the most deprived localities in the South East.
- Significant annual net migration into the area from London and population growth placing pressure on local services.
- Deficiencies in early years, primary and secondary education, especially in areas of growth.
- Healthcare provision struggling to keep up with growth.

Thames Estuary 2050 Growth Commission 2050 Vision [See reference 19]:

sets out an ambitious vision and delivery plan for north Kent, south Essex and east London, highlighting the key challenges and opportunities of the area,

alongside future trends. The 'Inner Estuary' area includes Dartford. Key challenges that have been highlighted for this area include:

- Air quality issues.
- Slow pace of delivery at Ebbsfleet Garden City.
- Poor education and skills attainment.

Current Baseline

Population

Dartford is situated in the northwest of the County of Kent, bordering Greater London. The Borough is the smallest of the 12 Kent districts, covering an area of 7,600 hectares. The Borough has two distinct areas. To the north of the A2 lie the built-up areas of Dartford, Greenhithe, Stone, Ebbsfleet Garden City and Swanscombe. To the south lies Metropolitan Green belt, consisting of open countryside with 12 villages and a number of small hamlets. Significant development is taking place in the northern half of the Borough. **[See reference** 20]

In 2019, the population of Dartford was estimated to be 112,600. Of this, 55,500 residents were male and 57,100 were female. **[See reference** 21**]** The working age population (16-64) was 71,400.

The population of Dartford increased by 15.8% over the 10 years to 2016 **[See reference** 22] and up to 2024 the population is expected to rise by 13.3%. These past and future increases illustrate the sustained period of population change that the Borough is experiencing. Of this increase, 6.6% will be attributable to natural change, 2.1% to net international migration and 4.5% to new within UK migration. The largest percentage population change is expected in those aged 65 and over - in 2024 the proportion of the population aged 65 and above will be 16%, an increase of 21.1% since 2014. **[See reference** 23]

However, the average age in the Borough is currently lower than the national and regional average. **[See reference** 24**]**

Financial and demographic data has been used to broadly categorise households in Dartford into 'mosaic groups'. In comparison to Kent as a whole, Dartford has a much higher percentage of 'aspiring homemakers' and 'domestic success'. The third most common set of households is the 'senior security' grouping. The least common household type is 'city prosperity', followed by 'country living' and 'rural reality', reflecting the urban and suburban nature of the Borough.

Population density in Dartford is higher than that for other Boroughs in Kent, at 13.4 persons per hectare (based on 2011 census data **[See reference** 25**]**). This is compared to 10.3 and 3.1 in the neighbouring Boroughs of Gravesham and Sevenoaks respectively, and 4.1 for Kent as a whole.

There is an expected increase of 59% in terms of households in the Borough from 2006 to 2031, largely to be accommodated through the development of new homes on a number of brownfield sites set out in the Core Strategy. The Borough delivered over 2,000 new homes between April 2016 and March 2018. **[See reference** 26**]**

Gypsy, Traveller and Travelling Showpeople

A Gypsy, Traveller and Traveling Showpeople Accommodation Assessment was undertaken in October 2013, to support the Core Strategy. This estimated that there were at least 408 individuals or 127 Gypsy or Traveller households in the Borough. These are housed on 14 private sites, three unauthorised sites, one Travelling Showpeople yard and 50 households of bricks and mortar. The study identified a need for 34 additional Gypsy and Traveller pitches between 2013 and 2028. **[See reference 27]**

Housing

The 2011 ONS census recorded 40,081 dwellings in the Borough. Some 26,819 (66.9%) were owned, either outright or with a mortgage, 5,947 (14.8%) were social rented and 6,385 (16%) were private rented. **[See reference** 28**]**

The northern area of Dartford Borough contains the most housing and, particularly due to current planning policy, is seeing the most growth, for example within Dartford Town Centre, the Northern Gateway area, Ebbsfleet Garden City and Stone and the Thames Waterfront. **[See reference** 29] The average price of a property in Dartford in August 2019 was £291,692, which is higher than the national average (£251,233) but under the regional average (£325,232). The average house price in Dartford rose by 4.0% between September 2019 and September 2020, from £297,627 to £309,566. **[See reference** 30]

The latest version of Dartford's Five-Year Housing Land Supply Paper shows land supply for the years 2019-2024. This indicates that there is a 5.64 year supply of deliverable housing sites in the Borough (4,718 homes), which exceeds the five-year housing requirement of 4,184 homes. **[See reference 31]** This is based on the revised NPPF which includes a new Housing Delivery Test that is now the basis for considering past delivery.

The net number of new homes delivered in 2018-19 was 1,013 and cumulatively the Borough has delivered 7,460 homes over their current plan period (2006/07-2017/18). This is in line with the local housing need management trigger but below the Core Strategy 'up to' capacity-based target. Of the houses completed in 2017-18, 160, or 16% were affordable (social rented, affordable rented and intermediate housing as defined in the previous NPPF). **[See reference 32]**

In terms of size, 17% of new dwellings completed on sites of up to 100 dwellings were two bed flats and 17% were one bed flats. Some 23% were three bed houses, 29% were four bed houses and only 5% and 4% were one and two bed houses, respectively. This was a new build flat to house ratio of 3:1

in that particular year, however, there remains more houses in the Borough than flats.

Education

Of the Borough's resident population, 21.1% have no qualifications, 17.3% have level 1 qualifications, 18.1% have level 2 qualifications, 11.5% have level 3 qualifications and 22% have level 4 qualifications and above. 9.8% of residents have apprenticeship or other qualifications. [See reference 33], [See reference 34]

In 2011 there were 2,122 school children and full-time students in the Borough, and 2,215 students aged 18 or over. **[See reference** 35**]**

Following expansions to primary schools in Dartford in recent years, forecast demand over the last four years has been met. The current challenge in Dartford is managing the demand created from new housing development which materialises before a new school can be opened and therefore needs to be accommodated through existing provision and expansion. Figures in the Kent Commissioning Plan for Education Provision 2018 – 2022 show that Dartford North may experience a small deficit in primary school places from 2019/20 onwards. Dartford West and Dartford Rural South are also expected to experience some deficiency between 2016 and 2022. In terms of secondary education forecasts indicate that there is sufficient year 7 provision for 2018/19 but a deficit for 2019/20. **[See reference 36]**, **[See reference 37]**

According to the Commissioning Plan for Education Provision in Kent **[See reference** 38], the number of primary age pupils is expected to continue rising significantly from 123,027 in 2016-17 to 128,905 in 2021-22, which is just fewer than 6,000 extra pupils over the next five years. In the same period the number of secondary age pupils in Kent schools is expected to rise significantly from 79,110 in 2016-17 to 91,520 in 2021-22, a rise of 12,000 pupils. Kent County Council (KCC) will aim to address these increasing school pupil numbers by

expanding existing schools and creating new primary, secondary and special schools.

Overall, there is a need for additional school places across the County. Whilst the government has provided funding towards the provision of school places KCC still estimates a funding shortfall of £101m in respect of places required by 2020. [See reference 39]

Deprivation

When considering all Indices of Deprivation (2019), the Borough of Dartford falls within the 50% of least deprived areas in the country. However, as shown in Figure B.1, it contains a mix of areas of higher deprivation and areas with low deprivation. For example, an area in Joyce Green Ward is the most deprived neighbourhood in the Borough and falls within the 10% most deprived areas nationally. The neighbouring ward of Littlebrook contains a neighbourhood that falls within the 20% most deprived areas nationally. Both areas are located in the north west corner of the Borough, north of Dartford town.

Many of the other neighbourhoods in the Borough are some of the least deprived in the country, for example, Joydens Wood. In general, the southern half of the Borough is less deprived than the northern half and particularly the north west. This pattern generally carries across all of the separate indices, though not including crime and barriers to housing and services which shows high levels of deprivation across the Borough. **[See reference** 40**]**

The median weekly full-time earnings for Dartford in 2018 was higher than both the Kent and national average. Unemployment in the Borough in 2017 was low and below the average for Kent and Great Britain. **[See reference** 41**]**

Health

The 2011 census statistics suggest that health in the Borough is reasonably good with 83% of the population reporting themselves to be in very good, or good health. Some 12% state they are in fair health, with only 3% and 1% in bad or very bad health, respectively. Furthermore, 85% of the population reported that their day to day activities are not limited by their health, 8% state that they are limited a little and 7% limited a lot. Some 10% of the population receive paid care. **[See reference** 42]

Average life expectancy in the Borough is slightly below the national average at 79.0 years for males and 82.3 years for females. **[See reference** 43] However, this varies across neighbourhoods, as life expectancy is 7.1 years lower for men and 5.7 years lower for women in the most deprived areas of Dartford than in the least deprived areas. **[See reference** 44]

In general, Dartford does not have high levels of health and disability deprivation. There are a number of exceptions, for example part of Joyce Green ward is amongst the 10% most deprived neighbourhoods in the country.

Estimated levels of adult excess weight in the Borough are worse than the England average and 23.4% of children in year 6 are classed as obese. Therefore, a priority for Dartford is reducing obesity levels, improving life expectancy and reducing the amount of adult inactivity.

There is a slight under provision of GP services in the Borough, as average patient list sizes are above the UK guidelines and further provision will be needed to accommodate growth demand.

Open spaces, sports and recreation

Dartford has approximately 1,466 hectares of open space, which is 19% of Dartford Borough. Of this, 75% is in the Green Belt. **[See reference** 45**]** Open

space is reasonably well dispersed across the Borough, however the Dartford Open Spaces Technical Paper (2011) **[See reference** 46] identifies a deficit in open spaces in the northern urban part of the Borough, and parts of the south of the Borough, which do not in places have easy walking access to major parks. In contrast to this, some of the more rural areas, which are set within Green Belt, of the Borough have very large amounts of open space, mainly due to the presence of two country parks and publicly accessible lakes and woodlands. **[See reference** 47]

Evidence submitted by Public Health England to the Inquiry into Public Parks [See reference 48] suggests that people who live in urban areas that have good access to green or blue space have better mental health. However, with regard other health benefits, Kent Nature Partnership's study (2014) [See reference 49] found that problems of physical inactivity and related health issues in an area are not limited to location and quality of greenspace, but wider socio-economic factors, although it was noted that presence of green space did have a positive effect.

Crime

Total recorded crime in the Borough has risen since 2010. Violent crime made up the highest proportion of crimes reported between March 2017 and February 2018. This is followed by anti-social behaviour and criminal damage and arson. Crime levels have stayed reasonably consistent over the year, with a very slight decline. In Kent as whole crime has risen since 2010, again with violent crime making up the highest proportion of crimes reported, meaning this issue is not unique to Dartford in the County.

Noise and traffic

There are several land uses within the Borough that have the potential to affect existing and new communities within close proximity to them. The A2 crosses the Borough east to west and the A282 (part of London Orbital M25 at Dartford

Crossing) crosses it north to south. These are strategic roads and have a significant amount of traffic using them. These strategic routes and congestion on the local road network caused by them have the potential to generate significant air pollution and noise for those living nearby. More detail regarding congestion and Air Quality Management Areas (AQMA) in the Borough is provided under the 'Transport Connections and Travel Habits' and 'Air, Land and Water Quality' topic headings of this baseline section.



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Economy

Policy Context

International

There are no specific international economic policy agreements relevant to the preparation of the Local Plan and the SA, although there are a large number of trading agreements, regulations and standards that set down the basis of trade with other nations.

National

National Planning Policy Framework (NPPF) [See reference 50] contains the following:

- The economic role of the planning system is to contribute towards building a "strong, responsive and competitive economy" by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.
- Planning policies should address the specific locational requirements of different sectors.
- Local planning authorities should promote long term viability and vitality of town centres and take a positive approach to their growth, management and adaption. Recognise that residential development has a role to play in supporting these ambitions.
- When considering edge of centre and out of centre proposals, preference should be given to accessible sites which are well connected to the town

centre. Sustainable growth and expansion of all types of business and enterprise in rural areas should be supported, both through conversion of existing buildings and well-designed new buildings.

The NPPF requires Local Plans to "set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth, having regard to Local Industrial Strategies and other local policies for economic development and regeneration."

National Infrastructure Delivery Plan 2016-2021 [See reference 51]: Brings together the Government's plans for economic infrastructure over this five year period with those to support delivery of housing and social infrastructure.

National Planning Practice Guidance (PPG) [See reference 52]: Reiterates the importance for Local Plans to include a positive strategy for town centres to enable sustainable economic growth and provide a wide range of social and environmental benefits.

The Local Growth White Paper (2010) [See reference 53]: Highlights the importance of economic policy that focusses on the delivery of strong, sustainable and balanced growth of income and employment over the long-term, growth which is broad-based industrially and geographically to provide equality of access and opportunity and build businesses that are competitive internationally.

Rural White Paper 2000 (Our Countryside: the future – A fair deal for rural England) [See reference 54]: Sets out the Government's Rural Policy Objectives:

- To facilitate the development of dynamic, competitive and sustainable economies in the countryside, tackling poverty in rural areas.
- To maintain and stimulate communities and secure access to services which is equitable in all the circumstances, for those who live or work in the countryside.

- To conserve and enhance rural landscapes and the diversity and abundance of wildlife (including the habitats on which it depends).
- To promote government responsiveness to rural communities through better working together between central departments, local government, and government agencies and better co-operation with non-government bodies.

Industrial Strategy: building a Britain fit for the future (2017) [See

reference 55]: Sets out a long-term policy framework for how Britain will be built to be fit for the future in terms of creating successful, competitive and open economy. It is shaped around five 'foundations of productivity' – the essential attributes of every successful economy: Ideas (the world's most innovative economy); People (good jobs and greater earning power for all; Infrastructure (a major upgrade to the UK's infrastructure); Business Environment (the best place to start and grow a business); Places (prosperous communities across the UK).

Sub-national

Kent and Medway Growth and Infrastructure Framework (GIF) 2018

update: Provides a strategic framework across Kent and Medway for identifying and prioritising investment across a range of infrastructure, for planned growth up to 2031. The Framework does not set out specific issues for Dartford but highlights a number of economic challenges faced by North Kent:

- Congestion of highway networks in town centres and arterial routes.
- Capacity limitations of the M2.
- Rail capacity on the North Kent line is stretched and will shortly be overcapacity.
- Growth in retail and hospitality sectors rather than in knowledge industries with their potential for high value-added growth.

Thames Gateway Kent Plan for Growth 2014 - 2020 [See reference 56]: Sets out the vision and objectives for creating the best conditions possible to

attract investment and deliver growth across North Kent. The economic objectives are to:

- Improve the productivity of the North Kent economy.
- Attract and retain investment in priority employment locations.
- Represent North Kent's interests to Government and the Local Enterprise Partnership.
- Support the delivery of at least 50,000 new homes between 2006 and 2026.
- Ensure all new development is of the highest possible quality.
- Improve the skills of North Kent's workforce and tackle unemployment.
- Support the creation of at least 58,000 jobs between 2006 and 2026.
- Attract and grow knowledge-based employment in North Kent.
- Increase the rate of new business start-ups.
- Maximise the economic benefits of universities.

Thames Estuary 2050 Growth Commission 2050 Vision: Sets out an ambitious vision and delivery plan for north Kent, south Essex and east London, highlighting the key challenges and opportunities of the area, alongside future trends. The 'Inner Estuary' area includes Dartford. Key challenges that have been highlighted for this area include:

- Unresolved approach to the Swanscombe Peninsula.
- Air quality issues.
- Slow pace of delivery at Ebbsfleet Garden City.
- Poor education and skills attainment.
- The need to maximise the homes and jobs that could be unlocked through infrastructure investment.

The Kent Environment Strategy [See reference 57] sets out a strategy for the economy and environment in Kent and considers the challenges and

opportunities Kent faces, most notably the sustained austerity on public sector finances and the need to work more efficiently. This means identifying opportunities to deliver across outcomes, working in partnership and accessing external funding wherever possible to deliver priorities.

South East Local Enterprise Partnership (SE LEP) Strategic Economic Plan 2014 [See reference 58] outlines the economic opportunities and challenges in the SE LEP which includes the authorities East Sussex, Essex, Kent, Medway, Southend and Thurrock. It makes the case for a Local Growth Fund of £200m a year investment into strategic infrastructure and business growth between 2015 and 2021. Major proposals as part of the deal include:

- Establishing a £5.2bn revolving property investment fund.
- Investing in growth corridors and sites to unlock capacity for 310,000 additional jobs and 250,000 new homes.
- Boosting the productivity of local businesses.
- Investing £128m in skills capital projects.
- Increasing the rate of housing delivery.

Current Baseline

Wholesale and retail trade (including the repair of motor vehicles and motorcycles) makes up the largest industry in the Borough with 21.3% of the working population employed in this industry. This is likely to be linked to the Bluewater Regional shopping centre, which is located in the Borough and employs large numbers of people. The next largest industries are administrative and support service activities (14.8%) and human health and social work activities (13.1%). **[See reference 59]**

In terms of retail, it is noted that as well as the town centre, the Borough has identified a range of other retail centres, meeting retail demand in the Borough.

In the year period up to June 2020, 30.5% of working residents were in associate professional and technical occupations, which is higher than the South East and England. **[See reference** 60] 89% (63,900) of 16-64 years olds living in Dartford are in employment and Dartford has experienced the largest change in total workforce since 1997 in Kent, with an increase of over 65%. **[See reference** 61]

In 2016 there were 63,000 jobs in Dartford, which is a rise of 1,000 from 2015 and 16,300 from 2001. The average gross weekly pay for full time workers was $\pounds 642$. [See reference 62] The median weekly full-time earnings for Dartford remain higher than both the Kent and Great Britain averages. [See reference 63]

Unemployment in Dartford is low, at only 1.7% in 2019 and is below the average for Kent and Great Britain. Unemployment is now lower than the level before the recession of the late 2000s and early 2010s. However, unemployment between the years of 2018 and 2019 rose slightly with 1,185 people unemployed in April 2019, up from 795 in 2018 (up 0.5%). [See reference 64] There is a notable gender split in terms of economic activity. Male rates of activity are high at 89%, but female rates, at 67% are the lowest of all surrounding Boroughs / districts. [See reference 65]

In 2019, there were 4,450 enterprises **[See reference** 66] in Dartford along with 5,390 local units. **[See reference** 67] The number of enterprises has increased from 2,830 in 2010 and the number of local units has increased from 3,765 in 2010. **[See reference** 68] Overall in 2018-19 there was a gain of 1.74ha in employment floorspace, largely due to two new units being completed in Northern Gateway. **[See reference** 69]

Dartford town centre is the Borough's main traditional town centre. The town centre vacancy rate for Dartford's primary frontage in 2018-19 is 14%, up 3% from the previous year. However, due to the removal of 7 retail units, the overall vacancy rate in primary and secondary frontages combined is down to 11.7% from 13.6% in the previous year. This is still slightly above the national average of 10.8%. The net change in floor space shows an increase of 4,452 sqm of

retail floorspace, although drinking establishments have seen a small decline. **[See reference** 70**]**

The Thames Gateway Kent Partnership identified the following key investment opportunities in the Borough **[See reference** 71**]**:

- Dartford Northern Gateway mixed use development which will deliver 1,300 new home and 1,200 new jobs.
- Improvements to Dartford town centre.
- Ebbsfleet Garden City a new generation garden city which includes; 15,000 homes, 5.5 million sq ft of commercial space and two million sq ft of retail, leisure and community facilities, for example:
 - Eastern Quarry 260 ha site with scope for 6,250 homes.
 - Ebbsfleet Central– 150 ha site which could deliver 790,000 sqm of mixed-use development.
 - Swanscombe peninsula 353 ha site proposed for a world class leisure resort.

Policy CS7 of the Core Strategy identifies the areas above together with other identified sites which together with new service jobs provide sufficient capacity to achieve a net growth of approximately 26,500 jobs. Thames Waterfront is to provide 456,000 sqm of B1, B2 and B8 use, providing approximately 11,800 jobs and Development at Dartford Town Centre 41,300 sqm of employment floorspace. Some, but not all, of this floorspace, most notably at Ebbsfleet Central, has or is to be delivered in the short to medium term.

A further 27,200 sqm is to be provided at other sites north of the A2 and 2,500 sqm south of the A2.

The Borough's transport infrastructure supports it as a net importer of labour. The M25 and A2 pass through the centre of the Borough and there are seven railway stations linking to London and Kent, including HS1 which access central London in 20 minutes and domestic services. However, the Borough

experiences significant difficulties with congestion and delays often spilling over from the strategic road to local road network, which has the potential to inhibit growth in the Borough. **[See reference** 72**]**

The UK has fully left the European Union as of 1st January 2021. It is uncertain what effect this will have on the Dartford economy, particularly given its excellent transport links to the continent and the rest of the UK.

The effects of the COVID-19 pandemic on the economy in Dartford are somewhat uncertain at this stage. Job productivity across the South East LEP reduced by 14.3% since the beginning of the pandemic, with a £12bn reduction in GDP in 2020. By June 2020, there was a 10% increase in unemployment and over a third of employed staff in the region had been furloughed. These trends are temporary, although the duration of the pandemic is reliant on a number of unknown future developments and the effects of the pandemic could be felt into the future. **[See reference 73]**

Transport Connections and Travel Habits

Policy Context

International

The Trans-European Networks (TEN): Created by the European Union by Articles 154-156 of the Treaty of Rome (1957), with the stated goals of the creation of an internal market and the reinforcement of economic and social cohesion. These include the Trans-European Transport Networks (TEN-T), which includes High Speed 1, and the Trans-European Telecommunications Networks (eTEN).

National

National Planning Policy Framework (NPPF) [See reference 74]:

Encourages local planning authorities to consider transport issues from the earliest stages of plan making so that: the potential impacts of development on transport networks can be addressed; opportunities from existing or proposed transport infrastructure, and changing technology and usage, are realised; opportunities to promote walking, cycling and public transport use are identified and pursued; and the environmental impacts of traffic and transport infrastructure can be identified and assessed. States that the planning system should actively manage growth patterns in support of these objectives.

National Planning Practice Guidance (PPG) [See reference 75]: Reiterates the requirement for local planning authorities to undertake an assessment of the transport implications of reviewing their Local Plan.

Door to Door: A strategy for improving sustainable transport integration [See reference 76]: Focuses on four core areas which need to be addressed so that people can be confident in choosing greener modes of transport. There are as follows:

- Accurate, accessible and reliable information about different transport options.
- Convenient and affordable tickets.
- Regular and straightforward connections at all stages of the journey and between different modes of transport.
- Safe and comfortable transport facilities.

The strategy also includes details on how the Government is using behavioural change methods to reduce or remove barriers to the use of sustainable transport and working closely with stakeholders to deliver a better-connected transport system.

Department for Transport, The Road to Zero (2018): Sets out new measures towards cleaner road transport, aiming to put the UK at the forefront of the design and manufacturing of zero emission vehicles. It explains how cleaner air, a better environment, zero emission vehicles and a strong, clean economy will be achieved. One of the main aims of the document is for all new cars and vans to be effectively zero emission by 2040.

Sub-national

Local Transport Plan 4: Delivering Growth without Gridlock 2016-2031 [See reference 77]: Sets out Kent County Council's Strategy and Implementation Plans for local transport investment for the period 2011-31. Transport priorities for Dartford include the following:

- Improvements or new bridge at A282 Junction 1a.
- Measures to address the impacts of Dartford Crossing traffic on the local road network.
- Swanscombe and Stone crossing station replacements.
- Infrastructure to support the proposed leisure park on the Swanscombe peninsula.
- A226 relief road at Swanscombe peninsula.
- A226 London Road / St Clement's Way.
- Expansion of Fastrack bus network.
- A2 Ebbsfleet junction improvements.
- A2 Bean junction improvements, including a new bridge.
- Public transport service improvements in the Borough.
- Improve walking and cycling infrastructure.
- Dartford town centre improvements: walking / cycling, bus access, easing congestion, variable message signs and car park signing.
- Crossrail extension to Dartford/ Ebbsfleet.

Pedestrian / cycle bridge over River Daren to Northern Gateway strategic site.

Kent and Medway Growth and Infrastructure Framework (GIF) 2018 update [See reference 78]: Provides a view of emerging development and infrastructure requirements to support growth across Kent and Medway. Issues highlighted in the Framework for Dartford include:

- Dartford is a net importer of labour.
- Expected increase of 59% in the size of the Borough (households) up to 2031.
- Dartford is seeing one of the fastest rates of home sales in the Country.
- Investment will be required in the M25 and the A2 in order to enable growth and keep Dartford moving.

More widely issues for North Kent include:

- Congestion on highway networks in town centres and arterial routes.
- Capacity limitation of the M2.
- Stretched rail capacity on the North Kent Line.

The Kent Design Guide [See reference 79]: Seeks to provide a starting point for good design while retaining scope for creative, individual approaches to different buildings and different areas. With regard to transport, the Design Guide promotes a sustainable approach to development which requires that location, transport connections, mix of uses and community facilities, together with careful husbanding of land and energy resources all combine to produce social and economic benefits: healthier living and working environments; improved efficiency and productivity in use; and reduction of fuel costs and the costs of vehicle ownership.

Network Rail South East Route: Kent Area Route Study (May 2018): sets out the strategic vision for the future of this part of the rail network over the next 30 years. The study builds on the recommendation in the Shaw Review that the

railway is planned based on customer, passenger and freight needs. The Route Study seeks to identify capacity requirements in the medium and long term to allow the railway to play its part in delivering economic growth, in addition to improving the connections between people and jobs and businesses and markets. It identifies some potential sources of capacity to meet needs into the early 2020s, but uncertainty remains beyond that. **[See reference** 80]

Current Baseline

Dartford's location at the edge of Greater London means that it is a key location in terms of the strategic highway network, with the M25 and A2 passing through the centre of the Borough. Dartford also has a significant rail infrastructure and contains seven railway stations: Dartford, Stone Crossing, Greenhithe, Swanscombe, Ebbsfleet International, Farningham Road, and Longfield. Ebbsfleet International connects the Borough directly to continental Europe and provides high speed services to central London (20 minutes). **[See reference** 81] Figure B.2 shows the major transport links in the Borough.

There is a good network of bus services in the northern, more urban part of the Borough, although frequent road congestion, associated with the strategic road network, can make journey times unreliable. Bus services in the more rural, southern part of the Borough are poor. **[See reference** 82**]**

The Fastrack bus service, which ultimately will connect nearly all of the major and new developments in Dartford and Gravesham, opened in 2006 and since then new phases have been introduced. Future plans for enhancements to the service continue in partnership with the Ebbsfleet Development Corporation, Gravesham Borough and Kent County Council.

As previously stated, the major interchange of two strategic traffic routes, the M25 and A2 is located within Dartford. Both routes suffer from severe congestion at peak times and when there are traffic incidents – which are frequent and often severe. These sections of the strategic road network cater for both regional and local journeys. **[See reference** 83**]**

Various development traffic assessments have identified a significant number of points on the network where current or projected capacity is at a point at which congestion and delays will rise in the absence of mitigation measures. There are four Air Quality Management Areas in the Borough. These are at the A282/M25 tunnel approach, the A2 Bean Interchange, London Road and Dartford Town Centre. The wider trend of increased freight and people movement is exacerbating congestion and air pollution locally. **[See reference 84]**

In addition to issues with road capacity, rail capacity on the North Kent line is also stretched and is likely to be overcapacity in the near future. A number of the stations have access or safety issues, and many are difficult to access by other forms of public transport. **[See reference** 85**]**

The Network Rail Kent Area Route Study also highlights capacity issues in the railways in Kent and states that the number of passengers using the railway across the route has increased substantially in recent years and further growth is forecast – up to 15% growth in passenger numbers between 2011 and 2024 and 47% up to 2044. Routes into London are particularly busy, with little capacity to operate additional services. **[See reference 86]**

Of the 40,081 households in the Borough in 2011, 7,684 had no access to a car or van, whereas 18,252 had one car or van in their household and 10,849 had two cars or vans in the household. In terms of mode of travel to work: 12% of the Borough's residents use the train, 4% use the bus, 41% drive, 0.75% cycle, 5% walk, 2.5% work from home, 1% use a motorcycle, 3% travel as a car passenger and the remaining 30% are not in work. **[See reference** 87] The Dartford Core Strategy includes measures to encourage a shift from dependency on car travel to reduce congestion, improve air quality and to support international and national policy responses to tackling climate change.

Unlike many of the local authorities surrounding London, Dartford is a net importer of labour as more people travel into Dartford to work than commute out of the Borough. This is due to some large employers and employment centres being located in the Borough, **[See reference** 88**]** for example Crossways

Business Park, the Bluewater Shopping Centre, Darent Valley Hospital, and Dartford town centre; some of which are not well served by direct rail services.

The Dartford crossing is located just north of the town of Dartford and is an extremely busy river crossing (linking Kent to Essex and to the north), regularly experiencing congestion. Whilst the location of a new Lower Thames Crossing has been identified east of Gravesend, due to open in 2027, it is not yet certain as to the degree to which it will relieve the level of vehicle crossings at the current location. **[See reference** 89]


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Air, Land and Water Quality

Policy Context

International

There are no specific international policy agreements relating to air, land and water quality that are of relevance to the preparation of the Local Plan and the SA.

National

Marine and coastal Access Act 2009: provides the legal mechanism to help ensure clean, healthy, safe, productive and biologically diverse oceans and seas. It provides for a Marine Management Organisation, a Marine Planning system that agrees objectives and priorities for the future for the sustainable use of the marine environment, the identification of Marine Conservation Zones (MCZ's) to provide the mechanism to deliver marine conservation commitments, creation of a continuous route around the entirety of the English and Welsh coastline plus a number of other marine management measures.

National Planning Policy Framework (NPPF) [See reference 90] contains the following:

- The planning system should protect and enhance soils in a manner commensurate with their statutory status or identified quality in the development plan.
- New and existing development should be prevented from contributing to, being put at an unacceptable risk from, or being adversely affected by, soil, air, water or noise pollution or land instability.

- "Despoiled, degraded, derelict, contaminated and unstable land" should be remediated where appropriate.
- The NPPF encourages the reuse of previously developed land where suitable opportunities exist.

National Planning Practice Guidance (PPG) [See reference 91]: Requires

local planning authorities to demonstrate every effort has been made to prioritise the use of poorer quality agricultural land for development where it has been demonstrated that significant development is required on agricultural land.

Waste management plan for England [See reference 92]: Provides an analysis on the current waste management situation in England and evaluates how it will support implementation of the objectives and provisions of the revised Water Framework Directive.

National Planning Policy for Waste (NPPW) [See reference 93]: Key

planning objectives are identified within the NPPW, requiring planning authorities to:

- Help deliver sustainable development through driving waste management up the waste hierarchy.
- Ensure waste management is considered alongside other spatial planning concerns
- Provide a framework in which communities take more responsibility for their own waste
- Help secure the recovery or disposal of waste without endangering human health and without harming the environment.
- Ensure the design and layout of new development supports sustainable waste management.

Safeguarding our Soils – A Strategy for England [See reference 94]: Sets out how England's soils will be managed sustainably. It highlights those areas which Defra will prioritise and focus attention in tackling degradation threats,

including better protection for agricultural soils; protecting and enhancing stores of soil carbon; building the resilience of soils to a changing climate; preventing soil pollution; effective soil protection during construction and; dealing with contaminated land.

Water White Paper [See reference 95]: Sets out the Government's vision for the water sector including proposals on protecting water resources and reforming the water supply industry. It states outlines the measures that will be taken to tackle issues such as poorly performing ecosystem, and the combined impacts of climate change and population growth on stressed water resources.

B.2 Managing Water Abstraction [See reference 96]: Is the overarching document for managing water resources in England and Wales and links together the abstraction licensing strategies.

Water for Life White Paper [See reference 97]: Sets out how to build resilience in the water sector. Objectives of the White Paper are to:

- Paint a clear vision of the future and create the conditions which enable the water sector and water users to prepare for it.
- Deliver benefits across society through an ambitious agenda for improving Water quality, working with local communities to make early improvements in the health of our rivers by reducing pollution and tackling unsustainable abstraction.
- Keep short and longer term affordability for customers at the centre of decision making in the water sector.
- Protect the interest of taxpayers in the policy decisions that we take.
- Ensure a stable framework for the water sector which remains attractive to investors.
- Stimulate cultural change in the water sector by removing barriers to competition, fostering innovation and efficiency, and encouraging new entrants to the market to help improve the range and quality of services offered to customers and cut business costs.

- Work with water companies, regulators and other stakeholders to build understanding of the impact personal choices have on the water environment, water resources and costs.
- Set out roles and responsibilities including where Government will take a stronger role in strategic direction setting and assessing resilience to future challenges, as well as clear expectations on the regulators.

The Air Quality Strategy for England, Scotland, Wales and Northern

Ireland [See reference 98]: Sets out a way forward for work and planning on air quality issues by setting out the air quality standards and objectives to be achieved. It introduces a new policy framework for tackling fine particles and identifies potential new national policy measures which modelling indicates could give further health benefits and move closer towards meeting the Strategy's objectives. The objectives of the Strategy are to:

- Further improve air quality in the UK from today and long term.
- Provide benefits to health quality of life and the environment.

Future Water: The Government's water strategy for England [See

reference 99]: Sets out how the Government wants the water sector to look by 2030, providing an outline of steps which need to be taken to get there. These steps include improving the supply of water; agreeing on important new infrastructure such as reservoirs; proposals to time limit abstraction licences; and reducing leakage. The document also states that pollution to rivers will be tackled, whilst discharge from sewers will be reduced.

A Green Future: Our 25 Year Plan to Improve the Environment [See

reference 100]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to this chapter are: using and managing land sustainably; recovering nature and enhancing the beauty of landscapes; and increasing resource efficiency and reducing pollution and waste. Actions that will be taken as part of these three key areas are as follows:

- Using and managing land sustainably:
 - Embed a 'net environmental gain' principle for development, including natural capital benefits to improved and Water quality.
 - Protect best agricultural land.
 - Improve soil health and restore and protect peatlands.
- Recovering nature and enhancing the beauty of landscapes:
 - Respect nature by using our water more sustainably.
- Increasing resource efficiency and reducing pollution and waste:
 - Reduce pollution by tackling air pollution in our Clean Air Strategy and reduce the impact of chemicals.

UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations [See

reference 101]: Sets out the Government's ambition and actions for delivering a better environment and cleaner air, including £1 billion investment in ultra-low emission vehicles (ULESvs), a £290 million National Productivity Investment Fund, a £11 million Air Quality Grant Fund and £255 million Implementation Fund to help local authorities to prepare Air Quality Action Plans and improve air quality, an £89 million Green Bus Fund, £1.2 billion Cycling and Walking Investment Strategy and £100 million to help improve air quality on the National road network.

Department for Transport, The Road to Zero (2018): Sets out new measures towards cleaner road transport, aiming to put the UK at the forefront of the design and manufacturing of zero emission vehicles. It explains how cleaner air, a better environment, zero emission vehicles and a strong, clean economy will be achieved. One of the main aims of the document is for all new cars and vans to be effectively zero emission by 2040.

Sub-national

Water for life and livelihoods. Part1: Thames River Basin District River Basin Management Plan DEFRA (Updated December 2015 [See reference 102]): Provides a long-term framework for managing the issues that affect the quality of the water environment in the Thames District River Basin. A series of actions and time periods is provided to address the significant water management issues within the Basin. These include physical modifications, pollution from waste water and surface water drainage in urban and rural areas, changes in natural flow and water levels due to human activity and climate change. Relevant actions include consideration of the impact on Water quality in the preparation of Local Plans, use of planning conditions and SuDS to manage pollution from urban and rural development, and local plan policy to ensure efficient use of water.

The Darent and Cray catchment partnership are responsible for local measures. Priority issues in the catchment are diffuse pollution, modified physical habitats and invasive non-native species.

Kent Environment Strategy [See reference 103] sets the following targets in relation to the quality of the environment:

- Decrease the number of days of moderate or higher air pollution and the concentration of pollutants (align with the Kent and Medway Air Quality Partnership and national monitoring standards).
- Work to reduce the noise exposure from road, rail and other transport.
- Reduce water use from 160 to 140 litres per person per day (note this is now out of date, as consumption has since reduced due to a programme of compulsory metering and water efficiency measures [See reference 104]).
- 28 Kent and Medway water bodies will be at good status by 2021.

Kent and Medway Growth and Infrastructure Framework (GIF) 2018 update: Sets out the fundamental infrastructure needed to support growth

planned to 2031 across Kent and Medway. The document identifies water and waste water challenges across the region arising from new housing, jobs and associated infrastructure. These include the need to provide additional clean water supplies and the management of increased amounts of waste water. Additional demand will need to be met from the abstraction of existing ground or surface water resources or through the development of new resources. Kent and Medway are already areas of serious water stress.

Kent Minerals and Waste Local Plan 2013-30 [See reference 105]:

Describes (1) the overarching strategy and planning policies for mineral extraction, importation and recycling, and the waste management of all waste streams that are generated or managed in Kent; and (2) the spatial implications of economic, social and environmental change in relation to strategic minerals and waste planning. The Plan identifies a number of areas of minerals safeguarding across Dartford. Some have already been developed or are identified for future development.

Current Baseline

Air quality

The Kent Environment Strategy **[See reference** 106] highlights Kent's unique challenge presented by the County's position between London and the continent. Easterly winds can bring pollution from cross-channel freight and the continent and westerly winds bring pollution from London. There are currently 40 air quality management areas in the County where air pollutants have been known to exceed objectives set by government.

There are four Air Quality Management Areas in the Borough. These are shown in Figure B.3 and are at:

 A282/M25 tunnel approach – declared for exceedances of PM10 and NO2.

- the A2 Bean Interchange declared for exceedances of NO2.
- London Road, Dartford declared for exceedances of PM10 and NO2.
- Dartford Town Centre declared for exceedances of NO2.

While levels of NO2 in the Borough's AQMAs is high, overall the pattern is of reducing NO2 (although there are fluctuations year on year). This is highlighted in the 2019 Air Quality Annual Status Report, with road traffic emissions from major roads the main source of air pollution in the borough. Dartford suffers from significant congestion, especially on the A282 Dartford Tunnel Approach Road, A2 Bean Interchange for Bluewater and main approach roads into Dartford town centre. **[See reference** 107**]**

There are still significant challenges ahead in order to achieve air quality objectives. Further reductions in NO2 will be achieved through policy documents such as the DfT's The Road to Zero: Next steps towards cleaner road transport and delivering our industrial strategy, which aims to put the UK at the forefront of the design and manufacturing of zero emission vehicles.

Land quality and soils

Much of the northern part of the Borough has been developed. However, the majority of the countryside south of the A2 is agricultural land and a significant proportion of it is classified as grades 1, 2 and 3a (the best and most versatile agricultural land). **[See reference** 108] This land lies entirely within the Green Belt.

The North Kent Plain covers the area south of the A2 and is one of the most fertile and productive agricultural areas in Kent. The agricultural landscape in this area needs enhancing with hedgerows and woodland corridors to encourage ecology. Despite protection under the 1997 Hedgerow Regulations, hedgerows have been lost in the Borough since the mid-70s. **[See reference** 109]

Geology and minerals

Regionally Important Geological/Geomorphological Sites (RIGS) are designated at the regional level for their geodiversity value. These are sites that do not have national recognition as SSSI but are important in the local area. In the Borough there are two RIGS **[See reference** 110**]**:

- Bluewater Quarry.
- Beacon Wood Country Park.

The main minerals that are safeguarded across the Borough include sub-alluvial river terrace deposits and river terrace deposits.

Water quality

The Kent Environment Strategy **[See reference** 111] names Kent as one of the driest regions in England and Wales. Whilst Kent's household water use was previously above the national average, in 2018-19 water consumption in Kent and Medway averaged 137 litres per person per day, compared with 143 litres nationally. **[See reference** 112] Nevertheless, its water resources are under continued pressure, requiring careful management and planning. The Dartford Development Policies Plan sets a requirement for development to meet water efficiency requirements.

Groundwater is a key water resource within Kent and supplies a significant proportion of water supply to users within Dartford. **[See reference** 113]

Projected population growth in Dartford is expected to increase demand for sewerage services. The 2009 Thames Gateway Water Cycle Study identified no major barriers to development associated with water supply and waste water infrastructure. **[See reference** 114**]** However, recently Ebbsfleet Development Corporation has worked with utility providers to provide a new network and facilities to accommodate future demand for sewerage services.

There are two main water bodies that flow through, or past the Borough: the Thames and the Darent. In terms of Water quality Middle and Lower Darent achieved moderate ecological Water quality and good chemical Water quality with a target to achieve good for both by 2021. [See reference 115] Thames Middle achieved moderate ecological Water quality in 2016 but failed to meet the chemical Water quality criteria. [See reference 116]

Kent's Water for Sustainable Growth Study **[See reference** 117] demonstrates that a large proportion of water bodies in Kent are failing to meet the Water Framework Directive objective of 'Good Status'. This is due to a number of reasons such as pressures ranging from physical modification, to pollution and over-abstraction. The Environment Agency's River Basin Management Plans **[See reference** 118] identify that the pressures are such that aiming to achieve improvement to 'Good Status' by 2027 in Kent is unlikely to be possible in many water bodies either due to technical infeasibility or improvement measures being disproportionately costly.

Pressures related to the provision of water supply and wastewater treatment are key contributors to the current status and future status of water bodies in Kent. In combination with other pressures, abstractions for public water supply and discharges of wastewater are impacting on key Water Framework Directive supporting elements which are critical to attaining overall Good Status; this includes impact on hydrological regime, biological quality and physico-chemical quality. **[See reference** 119]



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Climate Change Adaptation and Mitigation

Policy Context

International

United Nations Paris Climate change Agreement (2015): International agreement to keep global temperature rise this century well below 2 degrees Celsius above pre-industrial levels.

National

National Planning Policy Framework (NPPF) [See reference 120]: contains the following:

- To "support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure".
- Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary, it should be made safe without increasing Flood risk elsewhere.
- Local planning authorities should adopt proactive strategies to mitigate and adapt to climate change, taking full account of Flood risk, coastal

change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures.

National Planning Practice Guidance (PPG) [See reference 121]: Supports the content of the NPPF by promoting low carbon and renewable energy generation, including decentralised energy, the energy efficiency of existing and new buildings and sustainable transport.

Climate change Act 2008 [See reference 122]: Sets targets for UK greenhouse gas emission reductions of at least net zero by 2050 (this was originally 80% but was updated to 100% in June 2019) and CO2 emission reductions of at least 26% by 2015, against a 1990 baseline.

Flood and Water Management Act (2010) [See reference 123]: Sets out measures to ensure that risk from all sources of flooding is managed more effectively. This includes: incorporating greater resilience measures into the design of new buildings; utilising the environment in order to reduce flooding; identifying areas suitable for inundation and water storage to reduce the risk of flooding elsewhere; rolling back development in coastal areas to avoid damage from flooding or coastal erosion; and creating sustainable drainage systems (SuDS).

The UK Renewable Energy Strategy [See reference 124]: Sets out the ways in which we will tackle climate change by reducing our CO2 emissions through the generation of a renewable electricity, heat and transport technologies.

The Energy Efficiency Strategy: The Energy Efficiency Opportunity in the UK [See reference 125]: Aims to realise the wider energy efficiency potential that is available in the UK economy by maximising the potential of existing dwellings by implementing 21st century energy management initiatives on 19th century homes.

The National Adaptation Programme: Making the country resilient to a changing climate [See reference 126]: Sets out visions for the following sectors:

- Built Environment "buildings and places and the people who live and work in them are resilient to a changing climate and extreme weather and organisations in the built environment sector have an increased capacity to address the risks and take the opportunities from climate change".
- Infrastructure "an infrastructure network that is resilient to today's natural hazards and prepared for the future changing climate".
- Healthy and resilient communities "a health service, a public health and social care system which are resilient and adapted to a changing climate. Communities and individuals, including the most vulnerable, are better prepared to cope with severe weather events and other impacts of climate change. Emergency services and local resilience capability take account of and are resilient to, a changing climate".
- Agriculture and Forestry "profitable and productive agriculture and forestry sectors that take the opportunities from climate change, are resilient to its threats and contribute to the resilience of the natural environment by helping maintain ecosystem services and protect and enhance biodiversity".
- Natural Environment "the natural environment, with diverse and healthy ecosystems, is resilient to climate change, able to accommodate change and valued for the adaptation services it provides".
- Business "UK businesses are resilient to extreme weather and prepared for future risks and opportunities from climate change".
- Local Government "Local government plays a central in leading and supporting local places to become more resilient to a range of future risk and to be prepared for the opportunities from a changing climate".

The Clean Growth Strategy (2017) [See reference 127]: Sets out the approach of the government to secure growth of the national income while cutting greenhouse gas emissions. The key policies and proposals of the Strategy sit below a number of overarching principles: acceleration of clean growth including through recommendations for private and public investment to meet carbon budgets; providing support to improve business and industry energy efficiency; improving energy efficiency in the housing stock including

through low carbon heating; accelerating the shift to low carbon transport; delivering clean, smart, flexible power; enhancing the benefits and value of our natural resources; leading in the public sector to meet emissions targets; and ensure Government leadership to drive clean growth.

Understanding the risks, empowering communities, building resilience: The national flood and coastal erosion risk management strategy for England [See reference 128]: This Strategy sets out the national framework for managing the risk of flooding and coastal erosion. It sets out the roles for risk management authorities and communities to help them understand their responsibilities. The strategic aims and objectives of the Strategy are to:

- Manage the risk to people and their property.
- Facilitate decision-making and action at the appropriate level individual, community or local authority, river catchment, coastal cell or national.
- Achieve environmental, social and economic benefits, consistent with the principles of sustainable development.

A Green Future: Our 25 Year Plan to Improve the Environment [See

reference 129]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to this chapter are: using and managing land sustainably; and protecting and improving our global environment. Actions that will be taken as part of these two key areas are as follows:

- Using and managing land sustainably:
 - Take action to reduce the risk of harm from flooding and coastal erosion including greater use of natural flood management solutions.
- Protecting and improving our global environment:
 - Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.

Sub-national

Kent Environment Strategy [See reference 130] sets the following targets in relation to climate change mitigation and adaptation:

- Reduce emissions across the County by 34% by 2020 from a 2012 baseline (2.6% per year).
- More than 15% of energy generated in Kent will be from renewable sources by 2020 from a 2012 baseline.
- Reduce the number of properties at risk from flooding.

Growing the Garden of England: A strategy for environment and economy in Kent [See reference 131]: Seeks to ensure that a future sustainable community strategy helps to achieve a high-quality Kent environment that is low carbon, resilient to climate change, and has a thriving green economy at its heart. The Strategy is organised into three themes and ten priorities:

- Living 'well' within our environmental limits leading Kent towards consuming resources more efficiently, eliminating waste and maximising the opportunities from the green economy:
 - Make homes and public sector buildings in Kent energy and water efficient and cut costs for residents and taxpayers.
 - Ensure new developments and infrastructure in Kent are affordable, low carbon and resource efficient.
 - Turn our waste into new resources and jobs for Kent.
 - Reduce the ecological footprint of what we consume.
- Rising to the climate change challenge working towards a low carbon Kent prepared for and resilient to the impacts of climate change:
 - Reduce future carbon emissions.
 - Manage the impacts of climate change, in particular extreme weather events.
 - Support the development of green jobs and business in Kent.

- Valuing our natural, historic and living environment optimising the real economic and social benefits of high environmental quality while protecting and enhancing the unique natural and built-in character of Kent:
 - Utilise the full social and economic potential of a high quality natural and historic environment in Kent.
 - Conserve and enhance the quality of Kent's natural and heritage capital.
 - Ensure that Kent residents have access to the benefits of Kent's coast, countryside, green space and cultural heritage.

Thames Estuary 2100: the document sets out the Environment Agency's recommendations for Flood risk management for London and the Thames Estuary through to the end of the century and beyond. The Plan sets out the future shape of Flood risk management, strategic action that is needed and options to achieve this, local actions that are needed, and how the impact of rising sea levels needs to be addressed. Action Zone 5 covers Dartford Borough. Actions have been identified which include hard and soft measures including maintaining, enhancing and replacing existing defences and to incorporate Riverside Strategy concept into Local Plans. **[See reference** 132]

B.3 Energy South to East Local Energy Strategy (2019) [See reference 133]: Sets out the approach to enable the Coast to Capital, Enterprise M3 and South East LEPs of England to achieve clean growth up to 2050 in energy across the power, heat and transport sectors.

Current Baseline

Changes to the climate will bring new challenges to the Borough's built and natural environments. Hotter, drier summers may have adverse health impacts and may exacerbate the adverse environmental effects of air and water pollution. The UK Climate Projections (UKCP09) show that in 2050 the climate in the South East will be warmer with wetter winters and drier summers than at present. **[See reference** 134] Specifically:

- Under medium emissions, the increase in winter mean temperature is estimated to be 2.2°C; it is unlikely to be less than 1.1°C and is very unlikely to be more than 3.4°C.
- Under medium emissions, the increase in summer mean temperature is estimated to be 2.8°C; it is unlikely to be less than 1.3°C and is very unlikely to be more than 4.6°C.

A changing climate may place pressure on some native species and create conditions suitable for new species, including invasive non-native species.

The main sources of flooding in Kent Thameside have been identified as [See reference 135]:

- Failure / overtopping of the River Thames Tidal Defences.
- Failure / overtopping of the River Thames Tributaries' defences.
- Surface water and groundwater flooding.
- Failure to operate the flood defence gates.

The Environment Agency provides mapped data on the risk of flooding. This data is due to be updated in line with an updated hydrological model for the lower river Darent. These updated maps are likely to be available after Spring 2019. Figure B.4 shows areas at risk of flooding in the Borough, based on current Environment Agency flood zones.

The effect of new development on surface water Flood risk was investigated further in the Strategic Flood risk Assessment of Kent Thameside (2005). The outline analysis showed that consequences can be significant in low-lying areas with small catchments draining through the tidal defences. In these low-lying areas, foul drainage will need to be pumped and the siting and continuous operation of pumping stations in flood conditions will be key to prevent health hazards. However, breaching of the tidal flood defences would have much larger consequences, as set out in the Thames Estuary 2100 Plan. Groundwater flooding could similarly become an issue in low-lying areas.

The Government publishes data on the CO2 emissions per capita in each local authority that are deemed to be within the influence of local authorities. Kent is committed to reducing greenhouse gas emissions by 34% by 2020 and 60% by 2030 from a 2005 baseline (current progress is a 21% reduction since 2005). In the context of planned growth of Kent's population and housing development, additional low carbon and appropriate renewable energy infrastructure, as well as an increase in uptake of energy efficiency initiatives will be needed to ensure Kent meets their targets and benefits from the opportunities for innovation in these sectors. Some 80% of the housing stock that will be used over the next few decades is already in place and so opportunities to retrofit energy technologies and support a change to low carbon lifestyles will be key to supporting residents in reducing costs and improving energy security. **[See reference 136]**

Table B.1 shows CO2 (shown as kt CO2) emissions for Dartford for 2005 and 2017 across industrial, domestic and transport sectors. As can be seen in Table B.1, there has been a reduction between 2005 and 2017 across all sectors, although transport now accounts for over half of CO2 emissions in Dartford. **[See reference 137]**

Year	Industrial and Commercial	Domestic	Transport	Total
2005	315.1	207.7	437.9	957.9
2017	121.2	144.5	392.5	653.4

Table B.1: CO2 emissions in Dartford (kt CO2)

Of the 12 Kent local authorities, Dartford ranks 4th worst (after Swale, Tonbridge and Malling, and Sevenoaks respectively) for CO2 emissions per capita in 2017, at 6.1 tonnes. However, this figure was 10.6 tonnes per capita in 2005 which is a 47.7% reduction in 12 years. **[See reference** 138] The Dartford Greenhouse Gas Emission Report 2016/17 also reports a decrease in the Borough's total Greenhouse Gas emissions over the past 9 years. In 2008/9

total emissions in terms of carbon dioxide equivalent were 3580 CO2e, in 2016/17 this was down to 1792 CO2e. [See reference 139]

In October 2019, Dartford Borough Council declared a climate emergency, acknowledging the seriousness of rising global temperatures and recognising that this presents "a clear and present threat to our world". The resolution set out an aspiration for the Council to tackle the effects of climate change earlier than the 2050 national target and the 2030 target that has previously been proposed for the local area. **[See reference** 140**]**



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Biodiversity

Policy Context

International

International Convention on Wetlands (Ramsar Convention) (1976): International agreement with the aim of conserving and managing the use of wetlands and their resources.

European Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979): Aims to ensure conservation and protection of wild plant and animal species and their natural habitats, to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species).

International Convention on Biological Diversity (1992): International commitment to biodiversity conservation through national strategies and action plans.

United Nations Declaration on Forests (New York Declaration) (2014): international commitment to cut natural forest loss by 2020 and end loss by 2030.

National

National Planning Policy Framework (NPPF) [See reference 141]:

Encourages plans to "identify, map and safeguard components of local wildliferich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity;

wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation". They should also promote the conservation, restoration and enhancement of priority habitats and species, ecological networks and measurable net gains for biodiversity.

National Planning Practice Guidance (PPG) [See reference 142]: Supports the NPPF by requiring Local Plans to include strategic policies that conserve and enhance the natural environment through sustainable development.

Natural Environment and Rural Communities Act 2006 [See reference 143]: Places a duty on public bodies to conserve biodiversity.

Biodiversity 2020: A strategy for England's wildlife and ecosystem services [See reference 144]: Guides conservation efforts in England up to 2020 by requiring a national halt to biodiversity loss, supporting healthy ecosystems and establishing ecological networks. The Strategy includes 22 priorities which include actions for the following sectors: Agriculture, Forestry, Planning & Development, Water Management, Marine Management, Fisheries, Air pollution and Invasive Non-Native Species.

Biodiversity offsetting in England Green Paper [See reference 145]:

Biodiversity offsets are conservation activities designed to compensate for residual losses. The Green Paper sets out a framework for offsetting.

A Green Future: Our 25 Year Plan to Improve the Environment [See

reference 146]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to this chapter are: recovering nature and enhancing the beauty of landscapes; securing clean, productive and biologically diverse seas and oceans; and protecting and improving our global environment. Actions that will be taken as part of these three key areas are as follows:

Recovering nature and enhancing the beauty of landscapes:

- Develop a Nature Recovery Network to protect and restore wildlife and provide opportunities to re-introduce species that have been lost from the countryside.
- A 'net gain' (environmental improvements, habitat creation, investment into schemes etc) principle for development to be embedded into national and local policy.
- Securing clean, healthy, productive and biologically diverse seas and oceans:
 - Achieve a good environmental status of the UK's seas while allowing marine industries to thrive and complete our economically coherent network of well-managed marine protected areas.
- Protecting and improving our global environment:
 - Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.
 - Support and protect international forests and sustainable agriculture.

Marine and coastal Access Act 2009: provides the legal mechanism to help ensure clean, healthy, safe, productive and biologically diverse oceans and seas. It provides for a Marine Management Organisation, a Marine Planning system that agrees objectives and priorities for the future for the sustainable use of the marine environment, the identification of Marine Conservation Zones (MCZ's) to provide the mechanism to deliver marine conservation commitments, creation of a continuous route around the entirety of the English and Welsh coastline plus a number of other marine management measures.

Sub-national

Kent Environment Strategy [See reference 147] sets the following targets in relation to biodiversity:

A minimum of 65% of local wildlife sites will be in positive management and 95% of SSSIs will be in favourable recovery by 2020.

- 60% of local wildlife sites will be in positive management.
- SSSIs will be in favourable or recovering status by 2020.
- Status of bird and butterfly specifies in Kent and Medway are quantified.
- Complete a natural capital assessment for Kent by 2017.

Kent Biodiversity Action Plan [See reference 148]: includes 28 Kent Habitat Action Plans. Each Plan denotes the importance of conserving, enhancing and restoring the natural condition of a habitat by working together on projects.

A Living Landscape for the South East [See reference 149]: Sets out a vision for the South East Ecological Network, which involves the restoration and rebuilding of the natural environment, bringing wildlife into our towns and cities, and addressing the challenge of conserving marine wildlife. The document highlights the following issues:

- There is a need to increase the ability of the environment to protect us from flooding and to soak up carbon dioxide ('ecosystem services'). This will demand the restoration of extensive areas of natural habitat, particularly wetlands and woodlands.
- Better access to the natural environment helps improve mental and physical health and improves quality of life. There is a need to bring wild places to more people and bring more people into wild places.
- Isolated nature reserves and other protected sites are unlikely to be able to sustain wildlife in the long term. Sites will need to be buffered, extended and linked if wildlife is to be able to adapt to climate change.
- Outside protected sites, once common and widespread species are in catastrophic decline. Reversing this decline needs a new approach.

Securing the value of nature in Kent [See reference 150]: Explains the benefits of harnessing the value of nature to support business and economy, public health and productive and environmental management.

Swanscombe Marine Conservation Zone – a section of the Thames Estuary in the North West of Dartford has been proposed by the Government as a Marine Conservation Zone (MCZ). If designated, the MCZ would protect tidal mud, sand, shell and grave seabeds, which would provide habitat for the tentacled lagoon worm, which is scarce in the UK. Only port development is likely to be impacted by the MCZ.

Current Baseline

Despite the small scale of the Borough, it encompasses a wide range of habitats. UK BAP priority habitats within Dartford include [See reference 151]:

- Marshes coastal saltmarshes, coastal grazing marshes and floodplain grazing marshes.
- Water bodies aquifer fed naturally fluctuating water bodies, eutrophic standing waters, ponds, rivers and streams.
- Lowlands fens, calcareous grasslands, dry acid grassland, meadows and heathland.
- Woodlands mixed deciduous woodland, wet woodland.

Natural England has identified 76 different Natural Areas across England based on distinct ecological divisions, of which three are relevant to Dartford **[See reference** 152**]**:

- Greater Thames Estuary the Natural Area covers the Dartford Marsh, Swanscombe Peninsula, the coast and low-lying hinterland. The intertidal zone in Dartford is dominated by salt marshes. These are separated along most of its length by man-made sea defences. Urban development is also present. The area is characterised by open, predominantly flat landscapes and panoramic seascape views.
- North Kent Plain the Natural Area covers south of the A2 and consists of open, low and gently undulating land. It is one of the most fertile and productive agricultural areas in Kent with intensively cropped irregular fields in addition to woodland.

North Downs - the Natural Area is present in the south eastern tip of the Borough. The North Downs form one of the most striking landscape features in the South East of England and have outstanding nature conservation interest.

The Borough contains a large number of designated wildlife sites. Along with 13 Local Wildlife Sites and five Regional Nature Reserves, there are five sites designated as both Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) in the Borough **[See reference** 153]. These are listed below with Natural England's SSSI condition summary from May 2018 shown in brackets after each SSSI, with more details about these sites provided on the Natural England website **[See reference** 154]:

- Swanscombe Skull Heritage Park (favourable).
- Baker Hole (unfavourable declining).
- Wansunt Pit (unfavourable no change).
- Darenth Wood / Lords Wood / Ladies Wood (90% favourable and 10% unfavourable recovering).
- Farningham Woods (favourable).

Additionally, in May 2019 the Swanscombe Marine Conservation Zone (MCZ) was designated. The MCZ is a small inshore site which covers an area of approximately 3km2 and is located within the Thames Estuary. MCZs will form the UK contribution to an international network of protected sites in the north east Atlantic. The network will help to deliver the government's vision of clean, healthy, safe, productive ad biologically diverse oceans and seas. MCZs protect typical, rare or declining habitats and species found in our seas.

The Thames Estuary and Marshes Ramsar site and Special Protection Area (SPA) lies downstream of Dartford, east of Gravesend. While this European Site does not fall within the Borough itself, research studies have identified that development in the Borough has the potential to impact these internationally important sites [See reference 155].

There are 16 Biodiversity Opportunity Areas (BOA) across Kent, of which two fall within Dartford. These are the Thames-side Green Corridors BOA and the Central North Downs BOA. These cover almost all of the undeveloped land in the north of the Borough and substantial amounts of land south of the A2. [See reference 156]

Figure B.5 shows the biodiversity designations in the Borough.

A number of protected and rare species are found in the Borough including nationally important solitary bees, rare spiders, rare beetles, rare flies, great crested newts, common frogs, grass snakes, common lizards, slow worms, owls, water voles, bats, badgers, hazel dormice and a range of water fowl and wading birds. [See reference 157]

Kent as a whole has not met its 2010 Biodiversity targets and, with biodiversity continuing to decline, it is unlikely that 2020 targets will be met without targeted interventions. Although there have been gains for wildlife in some areas, there is still a gradual loss of habitats and species in the County. For example, of the Local Wildlife Sites monitored over the past five years, 30% have been damaged and 2% lost. This represents a significant threat to the intrinsic value of Kent's natural environment and to the economic and social benefit that it provides. **[See reference** 158]



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Historic Environment

Policy Context

International

European Convention for the Protection of the Architectural Heritage of Europe (1985): Defines 'architectural heritage' and requires that the signatories maintain an inventory of it and take statutory measures to ensure its protection. Conservation policies are also required to be integrated into planning systems and other spheres of government influence as per the text of the convention.

Valletta Treaty (1992) formerly the European Convention on the Protection of the Archaeological Heritage (Revisited) **[See reference** 159**]**: Aims to protect the European archaeological heritage "as a source of European collective memory and as an instrument for historical and scientific study". UNESCO World Heritage Convention (1972): Through the convention, countries are required to ensure that measures are taken for the protection, conservation and presentation of cultural and natural heritage. They should also adopt a general policy that gives cultural and natural heritage a function in the life of the community and integrate the protection of heritage into comprehensive planning programmes. The convention also sets out for the designation of UNESCO World Heritage Sites (none of which are present in Dartford).

National

National Planning Policy Framework (NPPF) [See reference 160]: Plans should "set out a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. This strategy should take into account:

- the desirability of sustaining and enhancing the significance of heritage assets, and putting them to viable uses consistent with their conservation;
- the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
- the desirability of new development making a positive contribution to local character and distinctiveness; and
- opportunities to draw on the contribution made by the historic environment to the character of a place."

National Planning Practice Guidance (PPG) [See reference 161]: Supports the NPPF by requiring that Local plans include strategic policies for the conservation and enhancement of the historic environment, including a positive strategy for the conservation and enjoyment of the historic environment. It also states that local planning authorities should identify specific opportunities for conservation and enhancement of heritage assets.

The Government's Statement on the Historic environment for England 2010 [See reference 162]: Sets out the Government's vision for the historic environment. It calls for those who have the power to shape the historic environment to recognise its value and to manage it in an intelligent manner in light of the contribution that it can make to social, economic and cultural life. Includes reference to promoting the role of the historic environment within the Government's response to climate change and the wider sustainable development agenda.

The Heritage Statement 2017 [See reference 163]: Sets out how the government will support the heritage sector and help it to protect and care for our heritage and historic environment, in order to maximise the economic and social impact of heritage and to ensure that everyone can enjoy and benefit from it.

Sustainability Appraisal and Strategic Environmental Assessment, Historic England Advice Note 8 [See reference 164]: Sets out requirements

for the consideration and appraisal of effects on the historic environment as part of the Sustainability Appraisal/Strategic Environmental Assessment process.

Historic England, Corporate Plan 2020-2023 [See reference 165]: Contains the action plan which sets out how the aims of the corporate plan will be delivered. The plan includes six strategic objectives to demonstrate how Historic England will continue to work towards delivering the heritage sector's priorities for the historic environment.

Sub-national

The Kent Design Guide [See reference 166]: Seeks to provide a starting point for good design while retaining scope for creative, individual approaches to different buildings and different areas. It aims to assist designers and others achieve high standards of design and construction by promoting a common approach to the main principles which underlie Local Planning Authorities' criteria for assessing planning applications. It also seeks to ensure that the best of Kent's places remain to enrich the environment for future generations. The guide does not seek to restrict designs for new development to any historic Kent vernacular. Rather it aims to encourage well considered and contextually sympathetic schemes that create developments where people really want to live, work and enjoy life.

The Thames Gateway Delivery Plan [See reference 167]: seeks to celebrate the character and heritage of the Thames Gateway area, including the rivers and recognises that heritage assets can help build economic prosperity and create quality of life.

Current Baseline

Parts of Dartford Borough have been occupied since the Palaeolithic period, but more recently agriculture, industry and human activities have influenced the Borough's landscapes and townscapes. This has resulted in a number of

heritage designations in the Borough including: Listed Buildings, Conservation Areas, Registered Parks and Gardens and Scheduled Monuments. **[See reference** 168] The Borough's designated heritage assets are shown in Figure B.6.

The Borough contains seven Grade I Listed Buildings, 17 Grade II* and 154 Grade II. Listings tend to be clustered, with 49 in Southfleet, Betsham and Westwood, 30 in Dartford town centre and 27 in Ingress Park and Greenhithe Village. There are other clusters in the small towns and villages throughout the Borough.

There are three entries on the 'heritage at risk' register for the borough. These are Spring Head Roman site, Palaeolithic sites at Baker's Hole, Roman enclosure south east of Vagniacae. **[See reference** 169] These three assets have remained on the 'heritage at risk' register between 2019 and 2020 and are reported to be in 'declining' condition.

The Council began designating Conservation Areas in 1970. Currently Dartford has six Conservation Areas, listed below:

- Greenhithe.
- Southfleet.
- Hook Green.
- Red Street, Southfleet.
- Dartford Town Centre.
- Church Hill, Wilmington.

Dartford has 12 Scheduled Monuments, which range from Neolithic times onwards and include: field boundaries, enclosures, cemeteries, remains below ground and built structures. The majority, bar a small number in Ebbsfleet Valley and Bakers Hole, are located in the south of the Borough. **[See reference** 170**]**

The Borough also has one Designated Gardens of Special Historic Interest, both located in the south of the Borough.

St John's Jerusalem historic garden, Sutton-at-Hone.

Dartford protects its heritage assets through Conservation Area Appraisals, and, uniquely to Dartford, Areas of Special Character Appraisals.



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CB:VG EB:Ilott_J LUC FIGB2-6_10800_r0_HistoricEnviro_A4L 22/12/2020
Landscape

Policy Context

International

European Landscape Convention (2002): Promotes landscape protection, management and planning. The Convention is aimed at the protection, management and planning of all landscapes and raising awareness of the value of a living landscape.

National

National Planning Policy Framework (NPPF) [See reference 171]: Planning principles include:

- Recognising the intrinsic beauty and character of the countryside.
- Protecting and enhancing valued landscapes. Development should be sympathetic to local character and history, including the surrounding built environment and landscape setting.
- Conserve and enhance landscape and scenic beauty in National Parks, The Broads and Areas of Outstanding Natural Beauty.

A Green Future: Our 25 Year Plan to Improve the Environment [See

reference 172]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance

Appendix B Review of Relevant Plans, Policies and Programmes, and Baseline Information

to this chapter are: recovering nature and enhancing the beauty of landscapes. Actions that will be taken as part of this key area are as follows:

- Working with AONB authorities to deliver environmental enhancements.
- Identifying opportunities for environmental enhancement of all England's Natural Character Areas, and monitoring indicators of landscape character and quality.

Sub-national

Kent Downs Area of Outstanding Natural Beauty: Management Plan 2014-2019 [See reference 173]: Sets out measures to ensure that the natural beauty and special character of the landscape and vitality of the communities are recognised maintained and strengthened well into the future. The Kent Downs AONB unit is in the process of updating the management plan. Whilst the management plan only covers the period until 2019, an updated plan has not yet been published.

Kent and Medway Growth and Infrastructure Framework (GIF) update 2018: Provides a view of emerging development and infrastructure requirements to support growth across Kent and Medway. The document highlights the valuable role Green Infrastructure (including woodland in the Borough and the Kent Downs and High Weald Areas of Outstanding Natural Beauty as well as other parks and gardens) plays in assisting to deliver a wide range of benefits including recreation, biodiversity, health, climate change mitigation and adaptation and Water quality.

Current Baseline

Generally, Dartford can be split into two, the northern half of the Borough, north of the A2 is mainly urban, containing Dartford, Greenhithe and Swanscombe. To the south of the A2 the Borough is much more undeveloped and apart from a number of small settlements, is designated as Green Belt. This landscape is **Appendix B** Review of Relevant Plans, Policies and Programmes, and Baseline Information

gently undulating with the prominent features being arable fields and woodlands.

Classed as urban fringe, the land south of the A2 is an important resource for the enjoyment of rural and urban residents and provides access to the countryside for recreational pursuits. **[See reference** 174**]**

There are no national landscape designations in the Borough, although The Kent Downs Area of Outstanding Natural Beauty (AONB) is located just to the south of Dartford and therefore the Borough forms part of the setting of the AONB.

The Landscape Assessment of Kent **[See reference** 175] splits the Borough into a number of distinct landscape character areas:

- Western Thames Marshes low lying, flat, open marshland adjacent to the River Thames that has become fragmented into isolated remnants by urban and industrial development. Some areas retain a marshland character while others have been degraded by development. The marshes are formed of alluvium deposits, so there is a lack of landform features and the area is very low lying.
- Dartford and Gravesend Fringes pockets of land that have become isolated from the wider countryside to the south by the A2 and are now sandwiched between the road and the urban areas of Dartford and Gravesend. Land uses vary but are strongly influenced by urban areas.
- Swanley Fringe includes land just to the west of the River Darent on the sands, gravels and clays of the tertiary beds. The area is cultivated but also contains ancient woodland. The landscape has been affected by proximity to London, meaning roads and other suburban influences can dominate.
- Darenth Downs a broad steep sided valley either side of the River Darent carved out of the chalk. The slopes have a smooth, open, arable character. The M20 / A20 corridor marks the southern boundary of the character area and A2 crosses to the north and the M25 and A225 cut through the middle. The urban edge is visible from many areas.

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- Lower Darent Valley defined by a narrow band of alluvial floodplain gravels which form a flat, wet landscape characterised by water filled gravel pits. Slopes and broad and open and the valley contain extensive Roman remains. The A225 is a busy link through the area and noise from the M20 can be intrusive. The area currently forms a green link from the AONB into the developed Thames Side area.
- Southfleet Arable Lands forms part of the north Kent agricultural belt. It is a mix of flat and undulating landform, sloping generally towards the Thames estuary at Dartford and Gravesend. Apart from a few wooded hill tops, shelter belts and orchards the land is generally open, meaning the A2 dominates a wide area audibly and visually. The Channel Tunnel Rail Link also runs through the area

Appendix C

Assessment of Reasonable Alternatives

Main Plan Options

Main Plan Option 1: To what extent should brownfield land in the Borough be used for new homes and jobs?

This Main Plan Option comprised four options:

- 1A: Brownfield land should be used to its greatest extent across both the urban and rural parts of the Borough (alternative option).
- 1B: Brownfield land should be used to a full extent in locations very well served by public transport (preferred option).
- IC: Brownfield land not a strong priority, with non-Green Belt land encouraged for development (including some greenfield sites).
- 1D: Reject a brownfield land focus, in favour of new growth locations elsewhere in the Borough, including more dispersed development that may include locations within the Green Belt.

Table C.1: SA scores for Main Plan Option 1: To what extent should brownfield land in the Borough be used for new homes and jobs?

SA objectives	Option 1A	Option 1B	Option 1C	Option 1D
SA 1: Housing	++?	++?	++	++
SA 2: Services and facilities	+/-?	++/-	?/+	?/+
SA 3: Community cohesion	+/-?	++	/+	/+
SA 4: Health and inequality	+/-?	++/-	/+	+/-
SA 5: Economy	?/+	++	+/-?	/+
SA 6: Sustainable travel	+/-?	++	/+	?/+
SA 7: Mineral resources	-?	-?	-?	-?
SA 8: Soil	++	++	?	?
SA 9: Water quality	-?	-?	-?	-?
SA 10: Air pollution	?/+	++/	/+	?/+
SA 11: Flood risk	-?	-?	?	?
SA 12: Climate change	+/-?	++/-	/+	?/+
SA 13: Biodiversity	-?	+/-?	-?	?
SA 14: Historic environment	?/+	+/-?	-?	-?
SA 15: Landscape	?/+	+/-?	-?	?

Each option is expected to have significant positive effects against SA objective 1 (Housing) as each would contribute strongly towards the local housing need in the Borough. Option 1B is expected to have the only significant positive effects for SA objectives 2 (Services and facilities), 3 (Community cohesion), 4 (Health inequality), 5 (Economy), 6 (Sustainable travel) and 12 (Climate change)

compared to the other options. These significant positive effects are expected as the option would enable new infrastructure requirements to be identified and planned alongside development, result in the regeneration of brownfield sites which could help to strengthen the quality of design, and legibility of development in places that already form part of the urban fabric, strengthening a sense of identity and would support the regeneration of brownfield land at locations well served by public transport. Regarding SA objective 2 (Services and facilities), 4 (Health and inequality) and 12 (Climate change) minor negative effects were also recorded for Option 1B as it may lead to increased pressure and capacity issues for local services and facilities.

With regard to Options 1C and 1D in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion), 4 (Health inequality), 5 (Economy) and 6 (Sustainable travel) significant negative effects are expected as the more dispersed pattern of growth could limit the potential for a high proportion of new residents to have a good level of access to existing services, facilities and public transport. These effects are mixed with minor positive effects as well. Significant negative effects mixed with minor positive effects are also expected against Option 1A in relation to SA objective 5 (Economy) as it could help to attract new business to the Borough through the development of high-quality employment space, but some of the new growth is to be achieved through the redevelopment of industrial areas which could reduce employment land in the Borough.

Significant positive effects are also expected against SA objective 8 (Soil) for Options 1A and 1B as they help promote the use of brownfield in the Borough, as such limiting the potential for loss of high value agricultural soils and resulting in a more efficient use of land in the area.

Significant positive effects are expected against Option 1B for SA objective 10 (Air pollution) as the regeneration of selected brownfield urban locations could help to locate new residents near existing provisions and support development in locations well served by public transport, which is likely to help reduce reliance on travel by private vehicle. However, significant negative effects are expected against each option for this SA objective as it is likely that Options 1A and 1B will contribute to traffic in existing AQMAs and Options 1C and 1D will

result in a high dependency on private car journeys, at least until improved public transport links are provided. The effect is also felt in relation to SA objective 12 (Climate change) for Options 1C and 1D.

Significant negative effects are expected against Option 1C and 1D for SA objectives 8 (Soil) and 11 (Flood risk) as the options reject a brownfield land focus and thereby would increase the number of impermeable surfaces which could increase Flood risk.

Significant negative effects are also felt against Option 1D for SA objectives 13 (Biodiversity) and 15 (Landscape) as it would not only increase greenfield land take in Dartford but also lead to higher likelihood that development will negatively affect ecologically sensitive areas, including areas of ancient woodland, priority habitats, and nationally designated biodiversity sites. Explicit consideration of the potential impact on these priority habitats was added following consultation comments on the previous iteration of the SA Report of the Dartford Local Plan. Significant negative effects are also expected against Option 1A for SA objective 14 (Historic environment) and 15 (Landscape) as it would take a less strategic approach to the redevelopment of brownfield land, with unplanned 'windfall' development forming a part of the strategy, it has potential to result in greater potential for adverse impacts in terms of heritage assets, historic character and landscape. However, for Option 1A minor positive effects are also expected.

Main Plan Option 2: How to ensure Dartford is a thriving town centre?

This Main Plan Option comprised three options:

2A: Support extensive radical change through promoting residential redevelopment in and around the town centre, (including at high densities), achieving a rapid expansion of residents in the town centre and new premises for businesses and shops.

- 2B: Encourage redevelopment of selected areas in and around the town centre; creating new spaces where this will achieve significant diversification over time of activities, and transformation of the attractiveness of Dartford town centre.
- 2C: New development proposals considered on a case-by-case basis, based on a looser vision which aims for gradual regeneration but with limited direction on where and how redevelopment should occur.

Table C.2: SA scores for Main Plan Option 2: How to ensureDartford is a thriving town centre?

SA objectives	Option 2A	Option 2B	Option 2C
SA 1: Housing	++	++	+
SA 2: Services and facilities	++/-?	++?	+/-?
SA 3: Community cohesion	+/-?	+?	+/-
SA 4: Health and inequality	++/-?	++?	+/-
SA 5: Economy	++/-?	++	-
SA 6: Sustainable travel	++/-?	++?	/+
SA 7: Mineral resources	+	+	+/-
SA 8: Soil	++	++	++/-?
SA 9: Water quality	-?	-?	-?
SA 10: Air pollution	++/	++/-	/+
SA 11: Flood risk		/+	+/-
SA 12: Climate change	++/-	++?	?/+
SA 13: Biodiversity	+/-	+/-	?
SA 14: Historic environment	?	?/+	+/-?

SA objectives	Option	Option	Option
	2A	2B	2C
SA 15: Landscape	?/+	++/-?	-?

Significant positive effects are expected with regards to SA objective 1 (Housing) for Options 2A and 2B as these would provide a substantial amount of new residential development in Dartford town centre, whilst Option 2C would provide a lesser level of residential development. Significant positive effects are expected against Options 2A and 2B for SA objectives 2 (Services and facilities), 4 (Health and inequality), 5 (Economy), 6 (Sustainable travel), 8 (Soil), 10 (Air pollution) and 12 (Climate change). This is because each option is likely to provide a high number of new residents with access to a wide range of existing services and facilities, including public transport links, vitality and viability of the town centre is likely to be supported, increase access to services and facilities and employment opportunities by sustainable transport and development would likely be on brownfield land. It should be noted that for Option 2A minor negative effects are also expected in relation to many of the SA objectives as issues relating to the capacity of existing services and facilities, such as public transport services, may emerge as a result of intensification of development, particularly in the short term. However, in relation to SA objective 10 (Air pollution) negative effects are expected against both Option 2A and 2B. The negative effects are expected to be significant against Option 2A as part of Dartford town centre is an AQMA and allowing for a very high level of development is likely to intensify existing air quality issues as at least some new residents are still likely to travel by private car. Significant negative effects are also expected against Option 2C with regard to air pollution as it is expected that this approach could result in the stagnation of existing services and facilities in the town centre location as a high proportion of new growth is provided at alternative locations over the plan period. Development provided in this manner could further limit the potential for modal shift to be achieved. This significant negative effect is also expected against Option 2C for SA objective 6 (Sustainable travel) for the same reason. Significant positive effects are also expected against SA objective 8 (Soil) for Option 2C, but a minor negative effect has also been recorded.

Significant positive effects are expected against SA objective 15 (Landscape) for Option 2B as it would allow for appropriate redevelopment in selected parts of the town centre and the surrounding areas to be achieved in a more phased manner and support the creation of high-quality environment with part of the emphasis being placed on improving prominent 'gateways' on the edge of the town. However, minor negative effects are also expected against this option. Option 2A is expected to have significant negative effects against this objective as it would support a high amount of development in the town centre. This would include a potential intensification of development as well as scope for some taller buildings, as such could have an adverse impact in terms of the established character of this area. This option is also expected to have a minor positive effect on this objective.

Significant negative effects are expected against Option 2A and 2B for SA objective 11 (Flood risk) and 14 (Historic environment) as development around Dartford town centre could fall within Flood Zones 2 or 3 around the River Darent and as the town centre includes a number of heritage assets, therefore development in the area could have an impact on the existing character and the setting of heritage assets. Option 2B is also expected to have minor positive effects against these SA objectives.

Significant negative effects are expected against SA objective 13 (Biodiversity) in relation to Option 2C as providing a modest level of growth in the town centre is likely to mean there is potential for more development to occur at alternative locations on greenfield land, which could have higher biodiversity value.

Main Plan Option 3: What strategy is most likely to retain green space in the Borough and deliver improvements?

This Main Plan Option comprised three options:

- 3A: Change the network of greenspaces in local planning policy to clearly indicate where is and is not priority in the Borough's securing greenspace, and possible improvements.
- 3B: Maintain the existing strategy for a green Borough through requiring new development to provide sufficient new open space and generally retaining existing local greenspace designations but consolidate how policies are presented.
- 3C: Increasing the amount and extent of Borough Open Space to protect green Dartford further.

Table C.3: SA scores for Main Plan Option 3: What strategy is most likely to retain green space in the Borough and deliver improvements?

SA objectives	Option 3A	Option 3B	Option 3C
SA 1: Housing	0	0	0?
SA 2: Services and facilities	0	0	0
SA 3: Community cohesion	+/-	+	+
SA 4: Health and inequality	++/-	+	++
SA 5: Economy	++/-	+	++
SA 6: Sustainable travel	++/-	+	++
SA 7: Mineral resources	0	0	0
SA 8: Soil	-	+	+
SA 9: Water quality	++/-	+	++
SA 10: Air pollution	+/-?	+	+?
SA 11: Flood risk	+/-	+	+
SA 12: Climate change	+/-?	+	+

Appendix C Assessment of Reasonable Alternatives

SA objectives	Option 3A	Option 3B	Option 3C
SA 13: Biodiversity	+/-	+	++
SA 14: Historic environment	0	0	0
SA 15: Landscape	+/-	+	+

Significant positive effects are expected against SA objectives 4(Health and inequality), 5 (Economy), 6 (Sustainable travel) and 9 (Water quality) for Options 3A and 3C. This is because both options have the potential to promote recreation and access to greenspace both of which are essential for both mental and physical health and wellbeing, increasing greenspace would help to make the Borough more attractive to those living, working and visiting the area and could be used to facilitate, enhance and connecting walking and cycling links and aim to expand the amount of greenspace in the Borough as well as enhance the existing greenspace. However, minor negative effects are also expected against Option 3A in relation to each of the objectives mentioned above some greenspace may be released for development.

Significant positive effects are also expected in relation to SA objective 13 (Biodiversity) for Option 3C as it aims to expand the amount of greenspace within the Borough and apply criteria to restrict the development of greenspace, thus contributing to strengthening ecological connectivity.

Main Plan Option 4: What is the best future for the Ebbsfleet Central area?

This Main Plan Option comprised three options:

- 4A: High-density business district.
- 4B: High-density urban heart with a range of uses, including employment, residential, a key health/education or leisure/culture use.
- 4C: Residential-led development.

Table C.4: SA scores for Main Plan Option 4: What is the bestfuture for the Ebbsfleet Central area?

SA objectives	Option 4A	Option 4B	Option 4C
SA 1: Housing	+?	+?	++
SA 2: Services and facilities	+?	++	++
SA 3: Community cohesion	+/-	++?	+?
SA 4: Health and inequality	+?	++?	+?
SA 5: Economy	++?	++/-	+?
SA 6: Sustainable travel	++/-	++?	++/-?
SA 7: Mineral resources	?	?	?
SA 8: Soil	?/+	?/+	?/+
SA 9: Water quality	-	-	-
SA 10: Air pollution	+/-	++/-	++/-
SA 11: Flood risk	-?	-?	-?
SA 12: Climate change	++/-?	++?	++/-?
SA 13: Biodiversity	?	?	?
SA 14: Historic environment	?	?	?
SA 15: Landscape	-?	-?	-?

Significant positive effects are expected against Options 4A and 4B for SA objectives 5 (Economy), as jobs would be generated and access to economic opportunities would be improved. Minor positive effects are expected for Option 4C, as a low level of employment would be provided through on-site services and facilities and commercial uses, but many residents would need to travel outside the site to work. Significant positive effects are expected for all options

with regards to SA objective 6 (Sustainable travel), as each scheme would include footpaths and possibly cycle routes increasing access to sustainable modes of transport. Minor negative effects are also expected against Option 4B in relation to SA objective 5 (Economy) and against Options 4A and 4C in relation to SA objective 6 (Sustainable travel).

Significant positive effects are expected in relation to SA objectives 3 (Community cohesion) and 4 (Health Inequality) for Option 4B as it would provide a mixed-use development scheme that according to its description would generate a vibrant lively community and include a key health/education or leisure/culture use and a range of prominent open spaces and public facilities.

Significant positive effects are expected for all options with regards to SA objective 12 (Climate change), as residents and workers will be able to access public transport at Ebbsfleet International station. For Options 4A and 4C this is mixed with minor negative effects as both are likely to result in additional commuting. Options 4B and 4C are also expected to have significant positive effects in relation to SA objectives 2 (Services and facilities) and 10 (Air pollution)as both options would provide development alongside supporting facilities to serve the local community thereby reducing the need to travel by private car. It is also assumed that all schemes would include footpaths and possibly cycle routes which would encourage people to walk and cycle to work, helping reduce the amount of greenhouse gas emissions generated by the private car. Minor negative effects are also recorded against all options regarding SA objective 10 (Air pollution).

Significant positive effects are also expected against SA objective 1 (Housing) for Option 4C as it is an entirely residential-led development that would help address a substantial part of the Borough's housing need.

Significant negative effects are expected in relation to SA objective 7 (Mineral resources), 13 (Biodiversity) and 14 (Historic environment) for each Option as there is potential for each option to result in development which could have an adverse effect on access to finite Mineral resources, a number of biodiversity assets and heritage assets. Significant negative effects are also expected

against SA objective 8 (Soil) as there is a small area in the south of the site that is designated at Grade 2 agricultural land; therefore, it is possible that development proposed by each of the options could result in a loss of Dartford Borough's Best and Most Versatile Agricultural Land. Minor positive effects are also expected for each of the options in relation to this SA objective.

Main Plan Option 5: What is the best future for the Swanscombe Peninsula area?

This Main Plan Option comprised three options:

- 5A: Support the development of an internationally important entertainment resort.
- 5B: A strategy to encourage sensitively integrated, lower density, mixed uses and ecological improvements.
- 5C: Do not specify potential uses but include a criteria-based policy to provide a basis for dealing with proposals that may be put forward.

Table C.5: SA scores for Main Plan Option 5: What is the bestfuture for the Swanscombe Peninsula area?

SA objectives	Option 5A	Option 5B	Option 5C
SA 1: Housing	0	+	0?
SA 2: Services and facilities	0	+	0?
SA 3: Community cohesion	-	+?	0?
SA 4: Health and inequality	?/+	++?	0?
SA 5: Economy	++	+	0?
SA 6: Sustainable travel	?	++/-	0?

SA objectives	Option 5A	Option 5B	Option 5C
SA 7: Mineral resources	?	?	0?
SA 8: Soil	+/-	+?	+?
SA 9: Water quality	-?	-?	+?
SA 10: Air pollution		++/-	+?
SA 11: Flood risk	?	?/+	+?
SA 12: Climate change		++/-	+?
SA 13: Biodiversity		++?	+?
SA 14: Historic environment	?	?	0?
SA 15: Landscape	?	+/-?	+?

Significant positive effects are expected for Option 5B against SA objectives 4 (Heath and Inequality), 6 (Sustainable travel), 10 (Air pollution), 12 (Climate change) and 13 (Biodiversity). This is due to the option's proposal of an ecological park which may incorporate footpaths and cycle routes that would help connect different areas within the site and provide further opportunities for biodiversity enhancement, improvements to public transport and delivery of linkages to Swanscombe town and its station. Minor negative effects are also expected in relation to SA objectives 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) as the proposed development would result in an overall increase in people coming to the area, some of which may come via private car, which would contribute towards CO2 emissions.

Significant negative effects are expected for Option 5A against SA objectives 4 (Health and inequality), 6 (Sustainable travel), 7 (Mineral resources), 10 (Air pollution), 11 (Flood risk), 12 (Climate change), 13 (Biodiversity), 14 (Historic environment) and 15 (Landscape). This is due to the option's proposal to develop an internationally important entertainment resort, which could generate noise and light pollution and potentially vibrations, such as from themed rides, live music and increased traffic. In addition, development would likely be highly

reliant on the car, particularly as the peninsula is not currently served by public transport and access to finite Mineral resources could be adversely affected. Finally, the peninsula falls within Flood Zones 2 and 3 and includes marshland, the site falls within a Biodiversity Opportunity Area, is adjacent to the Swanscombe Marine Conservation Zone, is within a Site of Archaeological Significance and falls within several priority habitats including coastal and flood plain grazing marsh, coastal saltmarsh and deciduous woodland. Therefore development of the area could have adverse effects. Explicit consideration of the potential impact on these priority habitats was added following consultation comments on the previous iteration of the SA Report of the Dartford Local Plan. Significant negative effects are also recorded for Option 5B for SA objectives 7 (Mineral resources), 11 (Flood risk) and 14 (Historic environment) for similar reasons. However, minor positive effects are also recorded for Option 5A in relation to SA objective 4 (Health and inequality) and in relation to SA objective 11 (Flood risk) for Option 5B.

Main Plan Option 6: How can Dartford best plan ahead for a better transport network?

This Main Plan Option comprised three options:

- 6A: To base the Local Plan's transport and development strategy Borough heavily on plan to extend Crossrail (Elizabeth Line) services to the Borough, and workup long-term development proposals now in support of major new rail provision.
- 6B: To focus on a Local Plan taking forward current transport schemes (Fastrack/buses, key road junctions, and rail), expecting development to be in walkable locations, and in parallel continue to explore the best longer-term way to secure a major 'modal shift' in transport choice, particularly through investigating Crossrail (Elizabeth Line) extension. We will minimise need to travel for journeys, through planning for trips that can be done by walking (or cycling); particularly to access schools, healthcare, shops and jobs.

6C: To focus Local Plan strategy heavily on securing new development that will help fund new road junctions.

Table C.6: SA scores for Main Plan Option 6: How can Dartfordbest plan ahead for a better transport network?

SA objectives	Option 6A	Option 6B	Option 6C
SA 1: Housing	0	0	0?
SA 2: Services and facilities	+/-?	+	-
SA 3: Community cohesion	+	+	-
SA 4: Health and inequality	+/-?	+	?/+
SA 5: Economy	++?	+	+/ -
SA 6: Sustainable travel	++/-?	++	
SA 7: Mineral resources	-?	-?	-?
SA 8: Soil	+	+	-
SA 9: Water quality	-?	-?	-?
SA 10: Air pollution	++/-?	++	/+
SA 11: Flood risk	+/-?	+	-
SA 12: Climate change	++/-	++	
SA 13: Biodiversity	+/-?	+/-?	?
SA 14: Historic environment	?/+	+/-?	?/+
SA 15: Landscape	+/-?	+/-?	?/+

Significant positive effects are expected for Options 6A and 6B in relation to SA objective 6 (Sustainable travel), 10 (Air pollution) and 12 (Climate change) as they would directly seek to achieve the promotion of modal shift in Dartford.

This would be achieved supporting major new rail provision in the Borough or by supporting a ranging approach including the investigation of the potential for extending Crossrail and delivering new local public transport schemes and promoting development in walkable locations, respectively. Minor negative effects are also expected for Option 6A in relation to these SA objectives. Regarding Option 6C significant negative effects are expected in relation to the above SA objectives as is likely to result in car dominant environments being promoted in the District and may also result in a more dispersed pattern of growth.

Significant positive effects are also expected against SA objective 5 (Economy) for Option 6A as it would place emphasis on new rail provision in the Borough and is likely to support the regeneration of Dartford town centre and the north of the Borough.

Option 6C is expected to have significant negative effects on SA objective 4 (Health and inequality) as it is likely to result in a greater likelihood of car dominant travel being promoted in the Borough and may also result in a more dispersed pattern of growth. As such, some residents (particularly those without access to a private vehicle) are likely to have a reduced level of access to services and facilities (including healthcare) in Dartford.

Significant negative effects are expected against SA objective 13 (Biodiversity) for Option 6C, as it is likely to lead to more dispersed development, which is expected to result in greater greenfield land take and may lead to development in close proximity to designated biodiversity sites. Mixed minor positive and minor negative effects are recorded against Options 6A and 6B.

Significant negative effects are also expected against SA objectives 14 (Historic environment) and 15 (Landscape) for Option 6C as it could result in a greater dispersal of growth in the plan area which could adversely affect the historic environment and landscape within the Borough. Significant negative effects are also expected in relation to Option 6A against SA objective 14 (Historic environment) as it is expected to support a focus which would allow for regeneration of the town centre. This area contains a high number of heritage

assets and there is potential for adverse impacts on their respective settings. Minor positive effects are expected against both Options against the above SA objectives.

Strategic Site options

Hythe Street/Kent Road

This Strategic Site Option comprised two options:

A: Mixed use redevelopment, part of town centre regeneration. It will be allocated for: leisure uses, a new primary care health hub and residential development. Development will be expected to retain the Co-op façade on Spital Street, provide active uses on street frontages and incorporate a public square.

B: Residential-led development

Table C.7: SA scores for Hythe Street/Kent Road

SA Objectives	Option A	Option B
SA 1: Housing	+	++?
SA 2: Services and facilities	++	+/-?
SA 3: Community cohesion	++/-?	+/-?
SA 4: Health and inequality	++/-?	+/-
SA 5: Economy	++?	+/-?
SA 6: Sustainable travel	++/-?	+/-?
SA 7: Mineral resources	0	0

SA Objectives	Option A	Option B
SA 8: Soil	++	++
SA 9: Water quality	-	-
SA 10: Air pollution	+/-	+/-
SA 11: Flood risk	?	?
SA 12: Climate change	++/-?	+/-?
SA 13: Biodiversity	0?	0?
SA 14: Historic environment	?	?
SA 15: Landscape	+?	+?

Significant positive effects are expected against Option A in relation to SA objectives 2 (Services and facilities), 3 (Community cohesion), 4 (Health and inequality), 5 (Economy), 6 (Sustainable travel) and 12 (Climate change) as is likely that new residents would be provided with access to a wide range of existing and new services and facilities, including a new primary care healthhub, cultural floorspace, leisure uses and a public square, as well as good public transport links. As such vitality and viability of the town centre is likely to be supported and a high level of growth in the town centre is likely to encourage journeys to be made by more sustainable modes of transport considering the shorter travel times involved. Minor negative effects are also recorded against SA objectives 3 (Community cohesion), 4 (Health and inequality), 6 (Sustainable travel) and 12 (Climate change) as allowing for additional growth could result in issues of over capacity of existing public transport services, particularly in the short term as well as congestion problems as some new residents will continue to travel by private car.

Significant positive effects are expected against Options A and B in relation to SA objective 8 (Soil) as the site consists of previous developed land. Significant positive effects are also expected against Option B in relation to SA objective 1 (Housing) as it is likely to make a contribution to the Borough's overall housing need.

Significant negative effects are expected against SA objective 11 (Flood risk) as the majority of the site lies within Flood Zone 3 and the remainder within Flood Zone 2.

Former Littlebrook Power Station

This Strategic Site Option comprised two options:

A: Brownfield land for employment / high tech logistics (up to 88,000 sqm) with greenspace and infrastructure appropriate for its location and riverside setting.

B: Residential-led development

Table C.8: SA scores for Former Littlebrook Power Station

SA Objectives	Option A	Option B
SA 1: Housing	0	++
SA 2: Services and facilities	+/-?	+/-?
SA 3: Community cohesion	+	+/-
SA 4: Health and inequality	+/-	+/-
SA 5: Economy	++	+
SA 6: Sustainable travel	?/+	?/+
SA 7: Mineral resources	-	-
SA 8: Soil	++	++
SA 9: Water quality	-	-
SA 10: Air pollution	?	?
SA 11: Flood risk	?	?

Appendix C Assessment of Reasonable Alternatives

SA Objectives	Option A	Option B
SA 12: Climate change		
SA 13: Biodiversity	?/+	?/+
SA 14: Historic environment	?	?
SA 15: Landscape	+?	+?

Significant positive effects have been recorded against SA objective 8 for both options as the site consists of previously developed land.

Significant positive effects are also expected against SA objective 1 (Housing) for Option B as it is a residential led development. Option A is expected to have significant positive effects against SA objective 5 (Economy) as it aims to provide additional employment / high tech logistics (up to 88,000 sqm) and as such provide employment opportunities in the area.

Significant negative effects are expected for both options against SA objectives 6 (Sustainable travel), 10 (Air pollution), 11 (Flood risk), 12 (Climate change), 13 (Biodiversity) and 14 (Historic environment) as employment and residential development in the area could result in issues of over capacity of existing public transport services, particularly in the short term, increasing the likelihood of private vehicle use. The majority of the site lies within Flood Zone 3 and the remainder lies within Flood Zone 2. With regards to flood risk, it is noted that Option B could include more vulnerable uses situated at ground floor level and ground floor residential units may require further measures to manage flood risk. In addition, it is noted that a future Thames Barrier could be located at or near this site, however, this is uncertain and would likely come forward after the plan period. The site is not well located to sustainable modes of transport, and it lies within a Biodiversity Opportunity Area – Thames-side Green Corridor and close to Dartford Marshes Local Wildlife Site. The site also falls within areas identified as priority habitats, including coastal saltmarsh and deciduous woodland. Explicit consideration of the potential impact on these priority habitats was added following consultation comments on the previous iteration of the SA Report of the Dartford Local Plan. Minor positive effects are also

recorded against SA objective 6 (Sustainable travel) and SA objective 13 (Biodiversity) for both options as there is potential for transport improvements in the long term and redevelopment may provide an opportunity to contribute positively to the Biodiversity Opportunity Area.

Preferred Policies Approach

This section summarises the findings of the SA of the Preferred Policies approach component of the Consultation Document. In many instances, the Preferred Policies are based on the work presented in the Main Options part of the Consultation Document, the SA of which is described above.

In some instances, the Preferred Policies component of the Consultation Document presents potential reasonable alternatives in the form of questions, which the SA has also appraised for completeness.

The Preferred Policies Approach covers the following themes:

- C.1 A: Pattern of development and Green Belt in the Borough
- C.2 B: Development delivery and housing location criteria
- C.3 C: Infrastructure
- C.4 D:Town centres and retailing
- C.5 E: Ebbsfleet Garden City
- C.6 F: Business premises and employment
- C.7 G: Natural environment and open space

C.8 H: Water management and renewable energy

C.9 I: Affordable housing

C.10 J: Housing type and size

C.11 K: Gypsies, travellers and travelling showpeople

C.12 It should be noted that, at this stage of the Local Plan Review, the Preferred Policies have not presented as policy wording with supporting text, but as a narrative of the intended policy direction. A summary of the findings of the SA for each theme is provided below:

A: Pattern of Development and Green Belt in the Borough

C.1 The Preferred Policy approach is to focus development on the two Priority Regeneration Centres of Dartford Town Centre and Ebbsfleet Garden City. It allows for some brownfield development at locations well located for public transport and within villages. It does not allow for any strategic release of Green Belt land.

C.2 The Preferred Policy approach derives primarily from the Main Plan Option 1, for which three alternative options were appraised. No further alternatives have been appraised.

Table C.9: SA scores for the Pattern of Development and GreenBelt in the Borough

SA Objectives	Likely Effect
SA 1: Housing	++?
SA 2: Services and facilities	++/-?
SA 3: Community cohesion	++
SA 4: Health and inequality	++/-?
SA 5: Economy	++
SA 6: Sustainable travel	++
SA 7: Mineral resources	-?
SA 8: Soil	++
SA 9: Water quality	-?
SA 10: Air pollution	++/
SA 11: Flood risk	?/+
SA 12: Climate change	++/-
SA 13: Biodiversity	+/-
SA 14: Historic environment	+/-?
SA 15: Landscape	+/-?

The Preferred Policy approach scores well against many of the SA objectives, with significant positive effects recorded against SA objective 1 (Housing), SA objective 2 (Services and facilities) albeit mixed with a minor negative effect, SA objective 3 (Community cohesion), SA objective 4 (health and inequalities) albeit mixed with a minor negative effect, SA objective 5 (Economy), SA objective 6 (Sustainable travel), SA objective 8 (Soils), and SA objective 12

(Climate change), albeit mixed with a minor negative. The primary reason for these significant positive effects is that the development strategy concentrates development primarily on brownfield land at locations that are well located for public transport, jobs and services and facilities, or where it is planned there will be investment in such assets and services.

A significant positive and significant negative score was recorded against SA objective 10 (Air pollution). Although the spatial strategy should ensure that there is less need to travel by car, it is still likely to result in increased traffic in the Air Quality Management Areas (AQMAs) where reducing air pollution is a priority.

Minor, often mixed, effects were recorded for the remaining SA objectives. In coming to this conclusion, it is assumed that concentrating development on brownfield land and the Priority Regeneration Centres should help to avoid significant adverse effects, although this will be very much dependent upon the precise location and design of development, including any mitigation measures to ensure no significant effects arise. For example, there is potential for a high amount of growth to come forward in close proximity to Bakers Hole SSSI, Swanscombe Skull Site SSSI and NNR as well as Alkerden Lane Pit and Dartford Marshes Local Designated Wildlife Sites, and development within Dartford Town Centre will need to take into account the listed buildings, conservation area and other historic assets that characterise this part of the Borough.

Development in northern urban areas, including much of the Priority Regeneration Centres would fall within high Flood risk areas, which means that an uncertain significant negative effect is recorded, as these areas also benefit from flood defences, which may need to be added to or reinforced in future.

B: Development Delivery and Housing Location Criteria

This Preferred Policy approach is to provide for 797 to 865 homes per annum, with the focus of development on brownfield land, strategic allocations, and the Priority Regeneration Centres of Dartford Town and Ebbsfleet Central. The Preferred Policy approach sets out criteria for the consideration of windfall development (Option B1).

An alternative of delivering a higher level of housing was also considered by the SA (Option B2).

SA Objective	Likely effect of Preferred Option B1	Likely effect of Alternative Option B2
SA 1: Housing	++	++?
SA 2: Services and facilities	++/-	++/?
SA 3: Community cohesion	++/-	++/?
SA 4: Health and inequalities	++/-?	++/?
SA 5: Economy	++	++/-?
SA 6: Sustainable travel	+?	+/-?
SA 7: Mineral resources	-?	-?
SA 8: Soils	++/-	++/-
SA 9: Water quality	-?	-?
SA 10: Air pollution	?/+	?/+

Table C.10: SA scores for Development Delivery and HousingLocation Criteria

SA Objective	Likely effect of Preferred Option B1	Likely effect of Alternative Option B2
SA 11: Flood risk	?	?
SA 12: Climate change	+/-	/+
SA 13: Biodiversity	+/-?	?/+
SA 14: Historic environment	+/-?	?/+
SA 15: Landscape	+/-?	?/+

The SA found that the Preferred Policy approach performed better than the alternative of delivering higher housing numbers, particularly with regards to SA objectives 6 (Sustainable travel), 12 (Climate change), 13 (Biodiversity), 14 (Historic environment) and 15 (Landscape). The Consultation Paper does not describe in detail how a higher housing figure would be delivered, although this could not be accommodated within the Preferred Options set out, therefore it was assumed it could lead to higher density development in Dartford town centre, maximising use of brownfield land (including in rural areas), and greater greenfield land take.

Both the Preferred Approach and the higher housing alternative were recorded as having significant positive effects against a number of SA objectives, being SA objective 1 (Housing), SA objective 2 (Services and facilities), SA objective 3 (Community cohesion), SA objective 4 (Health inequalities), SA objective 5 (Economy), and SA objective 8 (Soils), albeit in some cases this was also accompanied by a negative effect to reflect, for example, the additional pressure that could be placed on services and facilities to support the additional housing growth. For SA objectives 2 (Services and facilities), SA objective 3 (Community cohesion) and SA objective 4 (Health inequalities), the significant positive effect for Option B2 is mixed with a significant negative effect, as the higher level of development included in Option B2 would require a higher level of development outside of urban areas, therefore a higher proportion of development would be provided away from areas with good access to existing services and facilities and away from existing sustainable transport links.

As with the Spatial Strategy, the potential for significant negative effects on SA objective 10 (Air pollution) were identified, and the potential for significant adverse effects on SA objective 11 (Flood risk) were also noted for both options.

As with the Spatial Strategy, the SA recorded minor negative effects for most other SA objectives. Similar issues were identified for SA objective 13 (Biodiversity) and SA objective 14 (Historic environment) as the SA of the Spatial Strategy. However, for Option B2, significant negative effects (mixed with minor positive effects) were identified for SA objectives 12 (Climate change), 13 (Biodiversity), 14 (Historic environment) and 15 (Landscape). This is because this option will require greater greenfield land take and is likely to result in high density development in Dartford town centre, due to the higher level of development.

C: Infrastructure

This section of the Consultation Paper sets out the Preferred Policy approach to infrastructure, with respect to transport, community services such as health and education, plus flood management. It focuses on the need to alleviate congestion, and the importance of providing for public transport improvements, also making provision for an extension of Crossrail (the Elizabeth Line). It also sets out the funding arrangements.

The Preferred Policy approach derives from Main Plan Options for Transport. No further alternatives were identified.

Table C.11: SA scores for Infrastructure

SA Objective	Likely effect
SA 1: Housing	+/-?
SA 2: Services and facilities	++
SA 3: Community cohesion	+
SA 4: Health and inequalities	++
SA 5: Economy	++
SA 6: Sustainable travel	++/-
SA 7: Mineral resources	-?
SA 8: Soils	+
SA 9: Water quality	-?
SA 10: Air pollution	++/-
SA 11: Flood risk	++
SA 12: Climate change	++/-
SA 13: Biodiversity	/+
SA 14: Historic environment	?
SA 15: Landscape	+/-?

The SA found that the Preferred Policy approach to infrastructure is likely to result in primarily positive effects. Significant positive effects were identified for SA objective 2 (Services and facilities), SA objective 4 (Health and inequalities), SA objective 5 (Economy), SA objective 6 (Sustainable travel), SA objective 10 (Air pollution), SA objective 11 (Flood risk) and SA objective 12 (Climate change).

Although there is considerable emphasis on public transport improvements, and the provision of community services to support new development, it also provides for junction improvements and road upgrades which, although designed to alleviate congestion, could facilitate increased car travel, which potential effects on Sustainable travel, air quality and carbon emissions, so minor negative effects are also identified for these SA objectives.

An uncertain significant effect was identified for SA14 (Historic environment), due to the potential for harm to designated assets resulting from upgrades to the A2 and the extension to Crossrail. Similarly, significant adverse effects were identified for SA objective 13 (Biodiversity) due to the potential for habitat fragmentation, disruption to ecological networks, and disturbance from noise and light to sensitive species from new transport infrastructure.

Minor effects were recorded for the other SA objectives.

D: Town Centres and Retailing

This section of the Consultation Paper sets out the Preferred Policy approach to Dartford Town Centre, including residential, retail and other uses, and diversification, how the Town Centre's historic character will be taken into account, plus other aspects relevant to the operation of the Town Centre such as movement and smart technology. It identifies Town Centre regeneration locations, including the Hythe Street/Kent Road (Westgate) site, which is subject to separate SA as reported above.

It refers to the potential relocation of Dartford station, which could open up new opportunities for regeneration at Station Quarter and Prospect Place, but this has not been subject to SA at this stage because details are only beginning to emerge.

The Preferred Policy approach goes on to set out the network of shopping centres across the Borough, from Bluewater regional shopping centre, to Ebbsfleet, District and Neighbourhood Centres, describing the Preferred Policy approach for each to ensure they support rather than compete with one another. A more detailed policy approach is proposed for Bluewater, which focuses on remodelling and repurposing existing space, and considering the potential for appropriate leisure and sports provision, and potentially residential and small-scale employment uses.

Although no specific reasonable alternatives are identified, the SA has been broken down into the two main components of the Preferred Policy approach, being Preferred Approach D1, which relates to Dartford Town Centre and Town Centre Regeneration Locations, and Preferred Approach D2, being Boroughwide and Bluewater. For clarification, these are two parts of a single approach, rather than alternative options.

SA Objective	Likely effect of Dartford Town Centre and Regeneration Locations (D1)	Likely effect of Borough-wide and Bluewater (D2)
SA 1: Housing	++	+?
SA 2: Services and facilities	++/-?	+/-
SA 3: Community cohesion	++/-?	+/-
SA 4: Health and inequalities	++/-	+/-
SA 5: Economy	++/-?	++/-?
SA 6: Sustainable travel	++/-?	+/-?
SA 7: Mineral resources	-?	-?
SA 8: Soils	++	-
SA 9: Water quality	-	-
SA 10: Air pollution	++/-?	+/-?

Table C.12: SA scores for Town Centres and Retailing

SA Objective	Likely effect of Dartford Town Centre and Regeneration Locations (D1)	Likely effect of Borough-wide and Bluewater (D2)
SA 11: Flood risk	?	?
SA 12: Climate change	++/-?	+/-?
SA 13: Biodiversity	+/-	-?
SA 14: Historic environment	?/+	?/+

The Preferred Policy approach for Dartford Town Centre and the Regeneration Locations was considered to have a large number of significant positive effects, being against SA objective 1 (housing), SA objective 2 (Services and facilities), SA objective 3 (Community cohesion), SA objective 4 (Health and inequalities), SA objective 5 (Economy), SA objective 6 (Sustainable travel), SA objective 8 (Soils), SA objective 10 (Air pollution), and SA objective 12 (Climate change). These significant positive effects of investing in the established town centre and in the regeneration locations, which provide an opportunity to strengthen and diversify the mix of uses, although within easy reach of one another, and in good proximity of a range of public transport options. Some of the significant positive effects were mixed with minor negative effects, to reflect issues such as the potential to overburden existing services and facilities, and possible increased congestion affecting air pollution within the AQMA.

Only two significant negative effect were identified for the Preferred Policy approach for Dartford Town Centre and the Regeneration Locations, and this was with respect to SA objective 11 (Flood risk), recognizing that parts of the Town Centre lie within Flood Zones 2 and 3. However, the appraisal acknowledges that the Town Centre benefits from flood defences, so an uncertain effect is recorded. The other potential significant negative effect was with respect to SA objective 14 (Historic environment) given the wealth of historic assets within Dartford Town Centre. However, this acknowledged within the Preferred Policy approach, which states that heritage assets are an irreplaceable resource and proposals will need to be justified with an assessment of the impacts of proposals affecting heritage assets or their setting and need to take into account the significance of the assets. It states that it will ensure that development is sensitively designed in reflecting the town's unique historic character. The significant negative effect was therefore recorded as uncertain and accompanied by a minor positive effect.

With respect to the Preferred Policy approach to retailing Borough-wide and Bluewater in particular, only one significant positive effect was identified, which was in relation to SA objective 5 (Economy), because of the employment and economic benefits that derive from retailing, particularly given the regional significance of Bluewater. The significant positive effect was accompanied by a minor negative effect in recognition of potential disruption to traffic from further investment at Bluewater, and the knock-on impacts this can have on other sectors of the local economy.

Minor effects were recorded for all the other SA objectives for the Borough-wide and Bluewater Preferred Policy approach, with the exception of SA objective 14 (Historic environment), which is assessed as having a mixed minor positive and significant negative uncertain effect. Whilst most district and neighbourhood centres do not include conservation areas or listed buildings, there are a number of designated and non-designated assets across the Borough that could be affected by development, depending on where this comes forward. Bluewater has less in the way of historic interest although a Grade II listed building is within close proximity (although it is noted that Bluewater is set down in a quarry, which could minimize any effects on the listed building).

E: Ebbsfleet Garden City

This Preferred Policy approach sets out the proposals to create Ebbsfleet Garden City, which will comprise a mixed-use development, focused on Ebbsfleet International rail station, with interchanges with Northfleet station, linked into Fastrack and the local bus network. It includes the strategic site of Ebbsfleet Central which will comprise residential, employment, health, leisure, education, restaurants/bars and retail, with the potential to include a centre of
excellence for medical, education and learning purposes. The proposals for Ebbsfleet Garden City incorporate open space and structural green space.

The Preferred Policy approach also includes proposals for Swanscombe Peninsula, where the focus for development will be on brownfield land in the south/centre of the Peninsula (predominantly west of High-Speed rail/tunnel) and to the north of Swanscombe Town/Ebbsfleet Central Area. The main priority for development will be employment uses (including upgrades to existing employment areas) and improved transport links including Fastrack. Provision is also made for outdoor/ leisure uses and possible low-key visitor accommodation; plus local scale neighbourhood uses facilitated by limited residential development. The proposals include the creation of an ecological estuarine park (from Black Duck Marsh north-eastwards to the tip of the peninsula and adjoining land).

The Preferred Policy approach derives from Main Plan Options for Ebbsfleet Central and Swanscombe. No further alternatives were identified.

SA Objective	Likely effect
SA 1: Housing	++?
SA 2: Services and facilities	++
SA 3: Community cohesion	++?
SA 4: Health and inequalities	++?
SA 5: Economy	++
SA 6: Sustainable travel	++/-?
SA 7: Mineral resources	?
SA 8: Soils	+/-?
SA 9: Water quality	-

Table C.13: SA scores for the Ebbsfleet Garden City

SA Objective	Likely effect
SA 10: Air pollution	++/-?
SA 11: Flood risk	?/+
SA 12: Climate change	++/-?
SA 13: Biodiversity	++/-?
SA 14: Historic environment	?
SA 15: Landscape	+/-?

The Preferred Policy approach scored well against many of the SA objectives, with likely significant positive effects identified for SA objective 1 (Housing), SA objective 2 (Services and facilities), SA objective 3 (Community cohesion), SA objective 4 (Health and inequalities), SA objective 5 (Economy). These scores were in recognition of the range of uses, and the creation of a community with homes, jobs and a good range of services and facilities.

The Preferred Policy approach also recorded likely significant positive effects against SA 6 (Sustainable travel), SA objective 10 (Air pollution) and SA objective 12 (Climate change) albeit these were mixed with potential minor negative effects. The significant positive effects were identified because of the emphasis on high quality public transport services and interchanges, which will help to address air pollution and carbon emissions from transport. However, it also recognized that development at this scale will inevitably generate additional traffic, some of which could add to pollution along the AQMA corridors, particularly London Road.

Similarly, a significant positive effect was identified for SA objective 13 (Biodiversity) mixed with a minor negative effect, reflecting both the creation of an ecological park and the incorporation of waterscapes, open space and green infrastructure, but noting that the site includes a Local Wildlife Site as well as Bakers Hole SSSI, designated for its geodiversity.

Potential significant negative effects SA objective 7 (Mineral resources), given that parts of both the Ebbsfleet Central site and Swanscombe Peninsula is with Minerals Safeguarding Areas. A significant negative effect was recorded for SA objective 11 (Flood risk), because of the existence of Flood risk Zones 2 and 3 in this location, although a minor positive was also recorded because the area benefits from flood defences, and some of the proposals, such as the ecological estuarine park, could help manage Flood risk. An uncertain significant negative effect was identified for SA objective 14 (Historic environment), because the area contains a number of areas of archaeological potential, a site of archaeological significance, as well as scheduled monuments and listed buildings.

For all other SA objectives minor effects were identified.

F: Business Premises and Employment

The Preferred Policy approach for Business Premises and Employment builds on the high level of job growth and economic regeneration experienced by the Borough in recent years. It provides for a mix of premises, with encouragement for knowledge based, creative or high technology industries, with a focus on locations well served by public transport. Intensification and new job provision will be supported at selected sustainable locations, where consistent with improving environmental quality. It also supports a prosperous rural economy.

Two strategic allocations are identified, one at Ebbsfleet Central, which is appraised as part of the proposals for Ebbsfleet Garden City, and the other at Littlebrook Power Station, which is separately appraised, with the findings reported above.

Two alternatives were appraised to the Preferred Policy approach (F1) being not intensifying employment sites (F2) and releasing employment land for other uses (F3).

Table C.14: SA scores for Business Premises and Employment

SA Objective	Likely effect of Preferred Option F1	Likely effect of Alternative Option F2	Likely effect of Alternative Option F3
SA 1: Housing	0	0	?
SA 2: Services and facilities	+	0	?
SA 3: Community cohesion	+	0	?
SA 4: Health and inequalities	+	-	?
SA 5: Economy	++	-	
SA 6: Sustainable travel	+/-	0	0
SA 7: Mineral resources	-?	0	0
SA 8: Soils	++/-?	0	++
SA 9: Water quality	-	0	-?
SA 10: Air pollution	+/-?	0	0
SA 11: Flood risk		0	?
SA 12: Climate change	+/-	0	0
SA 13: Biodiversity	++/?	0	+/-
SA 14: Historic environment	+/-?	0	+?
SA 15: Landscape	+/-?	0	+?

The Preferred Policy approach recorded a significant positive effect against SA objective 5 (Economy) because of its strong support for economic and job growth. Significant positive effects were also recorded for SA objective 8 (Soils), because of the focus on brownfield land but with a minor negative effect to reflect that a risk that best and most versatile agricultural land could also potentially be developed.

A mixed significant positive and significant negative effect was identified for SA objective 13 (Biodiversity), because the brownfield focus will minimise undeveloped habitats being developed, but recognises that brownfield land can have its own biodiversity interest, and that Littlebrook Power Station is in a Biodiversity Opportunity Area and Ebbsfleet Central partially contains a Local Wildlife Site and SSSI. It is noted though, that the proposals for Littlebrook Power Station include 30% greenspace and 10% net biodiversity gain to be delivered, so uncertainty is also recorded depending upon its deliverability.

A significant negative effect was identified for SA objective 11 (Flood risk) because of the former Littlebrook Power Station falls entirely within Flood Zone 3 and parts of Ebbsfleet Central do too.

Minor effects were identified for all other SA objectives.

The alternatives considered do not perform noticeable better than the Preferred Policy approach. Alternative F2, which would not lead to the intensification of employment sites is, in practice, a continuation of the status quo, so no significant effects were identified, whether positive or negative. Alternative F3 performed poorly against SA objective 5 (Economy) because it would lead to a reduction or loss of existing employment sites, although a significant positive effect was recorded against SA objective 8 (Soils), because it would release previously developed sites for other uses. In many instances there was uncertainty about the effects of the alternatives because of the lack of detail about what they would mean with respect to, for example, housing delivery.

G: Natural Environment and Open Space

The Preferred Policy approach is to maintain an overarching strategy to create a multi-functional network of green spaces, protecting and enhancing biodiversity, retaining open space and playing pitches, and to ensure that new development provides for good quality amenity space, community resident space and public open space. The Preferred Policy approach seeks to protect and enhance designated sites, features and habitats, and requires new developments to provide for biodiversity net gain.

The Preferred Policy approach builds on Main Plan Option on Greenspace Strategy appraised above. No further alternatives were identified for appraisal.

SA Objective	Likely effect
SA 1: Housing	0
SA 2: Services and facilities	+
SA 3: Community cohesion	+
SA 4: Health and inequalities	++
SA 5: Economy	+
SA 6: Sustainable travel	+
SA 7: Mineral resources	0
SA 8: Soils	+
SA 9: Water quality	+
SA 10: Air pollution	+?
SA 11: Flood risk	+
SA 12: Climate change	+

Table C.15: SA scores for Natural Environment and Open Space

Appendix C Assessment of Reasonable Alternatives

SA Objective	Likely effect
SA 13: Biodiversity	++
SA 14: Historic environment	0
SA 15: Landscape	+

The SA of the Preferred Policy approach found that it would have positive effects for a number of SA objectives, in particular for SA objective 4 (Health and inequalities) and SA objective 13 (Biodiversity) for which significant positive effects were identified. This is because the Preferred Policy approach is to safeguard and enhance green space and biodiversity assets, including making provision for new open space in new developments and net biodiversity gain. These should have significant positive benefits not only for biodiversity but also for people's health and wellbeing.

No significant negative effects were identified.

H: Renewable Energy and Water Management

The Preferred Policy approach to Renewable Energy and Water Management addresses the need for the Borough to mitigate (i.e. reduce carbon and other greenhouse gas emissions) and adapt to (i.e. ensure the Borough is resilient to a changing climate such as extreme weather events) climate change.

With respect to climate change mitigation, the Preferred Policy approach encourages energy efficiency in the built environment and transport, the encouragement of renewable and low carbon energy sources. For climate change adaptation, the Preferred Policy approach is to encourage water efficiency in new development and minimise Flood risk.

No reasonable alternatives were identified.

Table C.16: SA scores for Renewable Energy and WaterManagement

SA Objective	Likely effect
SA 1: Housing	+
SA 2: Services and facilities	0
SA 3: Community cohesion	0
SA 4: Health and inequalities	+
SA 5: Economy	0
SA 6: Sustainable travel	+
SA 7: Mineral resources	0
SA 8: Soils	0
SA 9: Water quality	+
SA 10: Air pollution	+
SA 11: Flood risk	++
SA 12: Climate change	++
SA 13: Biodiversity	+
SA 14: Historic environment	0
SA 15: Landscape	+

The Preferred Policy approach is likely to give rise to positive effects for many of the SA objectives. Significant positive effects were identified for SA objective 11 (Flood risk) and SA objective 12 (Climate change) given the Preferred Policy approach's focus on these two aspects of sustainability.

No significant negative effects were identified.

I: Affordable Housing

The Preferred Policy approach aims to deliver a mix of housing tenures, including an increase in affordable housing. It sets out threshold criteria to be applied to development proposals to determine whether they should contribute to the affordable housing needs of the Borough. The Preferred Policy Approach will require proposals in the urban area of 15 dwellings (or 0.5ha) or more to contribute to the provision of affordable housing provision and, south of the A2, the threshold for seeking affordable housing provision will be a minimum of 10 dwellings. The Preferred Policy approach is to require a 35% affordable housing target subject to viability.

Two reasonable alternatives were identified to the Preferred Policy approach (I1). One reasonable alternative was to apply a Borough-wide threshold of 10 dwellings for the delivery of affordable housing (I2). The other was to retain the current overall target for affordable housing of 30% on qualifying sites (I3).

SA Objective	Likely effect of Preferred Option I1	Likely effect of Alternative Option I2	Likely effect of Alternative Option I3
SA 1: Housing	++/-?	++/-?	++/-
SA 2: Services and facilities	-?	-?	-?
SA 3: Community cohesion	+	+	+
SA 4: Health and inequalities	++/-?	++/-?	++/-
SA 5: Economy	0	0	0
SA 6: Sustainable travel	0	0	0

Table C.17: SA Scores for Affordable Housing

SA Objective	Likely effect of Preferred Option I1	Likely effect of Alternative Option I2	Likely effect of Alternative Option I3
SA 7: Mineral resources	0	0	0
SA 8: Soils	0	0	0
SA 9: Water quality	0	0	0
SA 10: Air pollution	0	0	0
SA 11: Flood risk	0	0	0
SA 12: Climate change	0	0	0
SA 13: Biodiversity	0	0	0
SA 14: Historic environment	0	0	0
SA 15: Landscape	0	0	0

The Preferred Policy approach and the two reasonable alternatives were considered to affect only a small number of SA objectives. All three approaches were considered likely to result in significant positive effects with respect to SA objective 1 (Housing). In all instances, it was considered that minor negative effects against this objective may also materialise, with respect to I1 and I2, because the higher thresholds may slow down delivery, and for I3, because it may be less likely to meet the full housing needs of the Borough.

Minor or neutral effects were considered likely for all other SA objectives.

J: Housing Type and Size

The Preferred Policy approach is to provide for a range of dwelling sizes and types designed and located in accordance with the future needs of Dartford's population. This includes considering the lifetime requirements of the population, such as disabled, younger and older people, and families.

No reasonable alternative policy approach was identified.

Table C.18: SA scores for Housing Type and Size

SA Objective	Likely effect
SA 1: Housing	++
SA 2: Services and facilities	0
SA 3: Community cohesion	+
SA 4: Health and inequalities	++
SA 5: Economy	0
SA 6: Sustainable travel	+
SA 7: Mineral resources	0
SA 8: Soils	0
SA 9: Water quality	0
SA 10: Air pollution	+
SA 11: Flood risk	0
SA 12: Climate change	+
SA 13: Biodiversity	0
SA 14: Historic environment	0
SA 15: Landscape	+

The Preferred Policy approach was considered likely to result in significant positive effects against SA objective 1 (Housing) and SA objective 4 (Health and inequalities), because it would deliver the range of homes needed in the Borough and would provide for those in need of special housing such as the elderly and disabled.

All other SA objectives had minor or negligible effects.

K: Gypsies, Travellers and Travelling Showpeople

The Preferred Policy approach identifies the need to deliver 48 additional permanent pitches for gypsies and travellers (which does not equal 48 new sites) and 1 additional permanent plot for travelling showpeople. This need will be accommodated within existing authorised site boundaries, sites occupied under temporary planning permission where permanent planning permission will be granted, small scale extensions to existing authorised sites, and potentially sites within Ebbsfleet Garden City. If these sites are unable to meet need, new sites would be researched.

No reasonable alternative policy approach was identified.

Table C.19: SA scores for Gypsies, Travellers and TravellingShowpeople

SA Objective	Likely effect
SA 1: Housing	++
SA 2: Services and facilities	0
SA 3: Community cohesion	++
SA 4: Health and inequalities	+?

SA Objective	Likely effect
SA 5: Economy	0
SA 6: Sustainable travel	+?
SA 7: Mineral resources	0
SA 8: Soils	+?
SA 9: Water quality	-?
SA 10: Air pollution	-?
SA 11: Flood risk	0
SA 12: Climate change	+/-?
SA 13: Biodiversity	0
SA 14: Historic environment	+?
SA 15: Landscape	-?

Significant positive effects were identified for the Preferred Policy approach with respect to SA objective 1 (Housing), because it would meet the housing needs of the gypsies, travellers and travelling showpeople community.

Each of the potential sites listed in the Preferred Policy approach was examined to see whether they would be likely to give rise to significant effects. Although a number of potential effects were identified, both positive, for example with respect to proximity to open space and public transport, and negative, for example with respect to proximity to designated biodiversity sites and heritage assets, in all instances the effects were considered uncertain, and not great enough to warrant being identified as significant effects.

Appendix D Recommendations from Previous Iterations of SA

Throughout the SA process there has been close engagement between LUC and the planning officers at Dartford Borough responsible for preparing the Local Plan. As part of this LUC reviewed an early version of the Preferred Options Consultation Document and made recommendations for improvement, some of which fed into the version of the Preferred Options Consultation Document that was subject to public consultation. In addition, the SA of the Preferred Options Consultation Document included recommendations for the plan and policies when they were drawn up on more detail. These recommendations, and the Council's response to them, are set out below.

Recommendations in relation to draft Preferred Options Consultation Document

This section sets out the recommendations from the SA in relation to an early version of the Preferred Options Consultation Document and how these were addressed in the final version of the Consultation Document.

Reference within the Consultation Document

Vision to 2036

Recommendations from the SA

To include the aspiration of being low carbon.

How they have been addressed by the Council

The Vision now states that 'Neighbourhoods across the Borough will be attractive, healthy, secure, environmentally resilient and low-carbon.'

Reference within the Consultation Document

Strategic Objectives

Recommendations from the SA

There should be a reference to the historic environment within the objectives.

How they have been addressed by the Council

Historic environment and heritage are included within SO1 and SO6.

Reference within the Consultation Document

Main Plan Option 1

Recommendations from the SA

To include access to jobs as a critical factor in Dartford for brownfield land to be regarded as positive and sustainable for development.

How they have been addressed by the Council

Jobs has been added.

Reference within the Consultation Document

Main Plan Option 2

Recommendations from the SA

- To include that significant parts of the town centres is within flood risk zones and the entire town centre lies within an AQMA and how these will be addressed through town centre development.
- To put greater emphasis on the importance of the historic environment within the town centre and how development will need to be sensitively designed.
- To include further national policy relevant to Dartford Town Centre, such as historic environment, air pollution, flood risk and transport.

How they have been addressed by the Council

- Full account of flood risk and air quality are requirements for town centre redevelopment as set out in the criterion of paragraph D15.
- Paragraph D13 covers this point, but we propose to amend it to take on board this recommendation.
- These are not specifically town centre or retail issues and apply Boroughwide. The plan is brief in terms of repeating national policy.

Reference within the Consultation Document

Main Plan Option 3

Recommendations from the SA

Option 3C performed the best against the SA objectives taken as a whole and should be the preferred option.

How they have been addressed by the Council

Borough Open Spaces were only recently designated and covered all known opportunities then. Broadening the areas designated will be challenging given the extensive existing coverage, and finding further land to include could lead to a diminution of the quality of land designation and may not always be very well justified. This could therefore place at risk the robustness of the policy and its effectiveness in protecting open spaces as a whole.

Reference within the Consultation Document

Main Plan Option 4

Recommendations from the SA

It should be noted that while Option 4B is the preferred option, there is potential for significant negative effects against mineral resources, soils, biodiversity and the historic environment. As such, this need to be factored into the development of this location. Also, the potential to generate traffic that flows into the AQMA should be taken into account.

How they have been addressed by the Council

Paragraph E4 emphasises environmental, design and public transport requirements. It should be noted that Ebbsfleet Central already benefits from a planning permission and the detailed provisions of the non-statutory Ebbsfleet Implementation Framework.

Reference within the Consultation Document

Main Plan Option 5

Recommendations from the SA

- To include another option making the peninsula into a nature reserve or country park, similar to Gillingham Riverside Country Park. This could be linked to large-scale development in the area, such as Ebbsfleet.
- Option 5B is supported by the SA, although potential significant negative effects in relation to mineral resources, flood risk and the historic environment were identified. As such, these will need to be addressed in proposals for the peninsula.

How they have been addressed by the Council

- Option 5B now involves directing development away from and helping facilitate a proposed estuarine ecological park as part of the Garden City and the wider green network of the Borough.
- The coverage of this broad location approach in a consultation document is considered appropriate. However, consideration will be given to further evidence and these factors for the Publication version of the plan.

Reference within the Consultation Document

B. Development Delivery and Housing Location Criteria

Recommendations from the SA

To also identify environmental assets and constraints in accordance with policies elsewhere in the plan within paragraph B23.

How they have been addressed by the Council

The current criteria address locational requirements to minimise likely key environmental impacts. Moreover, inevitably decisions will be made in parallel with more detailed environmental policies. The proposal flows from a specific local and national policy context. However, consideration may be given to extending the criteria after consultation responses have been received.

Reference within the Consultation Document

C. Infrastructure

Recommendations from the SA

- To include the priority of reducing air pollution especially in the AQMAs and for Dartford to be seeking to reduce its greenhouse gas emissions from transport as far as possible.
- To include the need to safeguard and where possible restore ecological networks with regard to transport infrastructure.
- To include linking the bus network to Littlebrook Power Station and Swanscombe Peninsula development areas.

How they have been addressed by the Council

- Reducing air pollution in AQMAs has not been specifically addressed. However, it is now emphasised within the Consultation Document that Dartford seeks to reduce its carbon emission and air pollution as far as possible.
- 'To benefit ecological networks' has now been included.
- A new local bus service may be part of the package of transport improvements. However, its feasibility would need to be confirmed. Rerouting Fastrack has been considered but is not currently regarded as a reasonable option given the operational impact on achieving a fast as possible public transport network. The policy emphasises links to the existing stops.

Reference within the Consultation Document

D. Town Centres and Retailing

Recommendations from the SA

- To promote the greening of the town centre e.g. tree planting and green roofs and walls etc. to help ameliorate air pollution and carbon emissions, to provide habitats and cooling of temperatures in extreme heat events.
- To add 'adapt to climate change' to paragraph D6.

How they have been addressed by the Council

Paragraph D15 was refined in response to the SA and includes soft landscaping, shelter and tree planting.

Reference within the Consultation Document

E. Ebbsfleet Garden City

Recommendations from the SA

To incorporate references to biodiversity net gain and design to adapt to climate change.

How they have been addressed by the Council

Biodiversity net gain is expected to become a statutory requirement, and its handling will be reviewed in the Publication plan.

Reference within the Consultation Document

G. Natural Environment and Open Space

Recommendations from the SA

■ To incorporate restoring ecological networks within paragraph G10.

How they have been addressed by the Council

It is proposed to include reference to this in paragraph G2.

Recommendations in relation to the published Preferred Options Consultation Document

This section sets out the recommendations from the SA in relation to the final version of the Preferred Options Consultation Document and how these were addressed in the Local Plan document to which this SA Report relates.

General recommendations

- Recommendation: Improving air quality and water quality should be integrated more thoroughly into the Consultation Document. It is recommended, for example that a focus on Air Quality Management Areas (AQMAs) be included within the Document as improving air quality in those areas should be prioritised.
 - How this has been addressed: Policy M2 (Environmental and Amenity Protection) refers to AQMAs and the supporting text sets out further information on them, including the need for applicable developments to provide Air Quality Impact Assessments to address this issue.
- Recommendation: Much of the Borough lies within Source Protection Zones (SPZs), and the River Darent is not achieving water quality targets.

Water quality is not specifically addressed in the Consultation Document. Therefore, a focus on water quality should be introduced into the Local Plan Review to ensure the risk of contamination and pollution is reduced.

 How this has been addressed: Policy M2 (Environmental and Amenity Protection) refers to the need to protect water quality, including in relation to groundwater source protection zones.

Main Plan Option 1: Brownfield Land

- Recommendation: Opportunities to enhance local character and biodiversity corridors should be taken as brownfield land comes forward for development.
 - How this has been addressed: Policies M1 (Good Design for Dartford) and M14 (Green and Blue Infrastructure and Open Space Provision) should ensure that new development encompasses these opportunities.

Main Plan Option 2: Dartford Town Centre

- Recommendation: The centre of Dartford contains an AQMA and measures should be encouraged to help reduce the potential for intensification of air quality issues at this location.
 - How this has been addressed: Policy D2 (Central Dartford Development Principles) includes reference to the need for development to improve air quality and grow the proportion of journeys made by active and public transport modes.
- Recommendation: As significant parts of Dartford town centre are in flood risk zones, mitigation measures should be put into place to address this.
 - How this has been addressed: Policy D2 (Central Dartford Development Principles) recognises the need for development to fully mitigate flood risk and ensure that development is safe for its lifetime, where located in areas at risk of flooding. Any development would also need to comply with policy M4 (Flood Risk and Riverside Design). The

Strategic Flood Risk Assessment outlines that site specific measures can be implemented on individual developments to manage the risk of flooding for sites in Central Dartford.

Main Plan Option 3: Green Space

- Recommendation: The Council should focus new open space provision in areas where there is a deficiency and improve open space in areas where there is a good existing quantity and accessibility. Consideration should be given to green space by typology and hierarchy. Green infrastructure (GI) is key and should be considered at the site selection stage, so that existing GI features are conserved and enhanced, and new GI is created in the most viable areas. Consideration should be given to GI provision in the surrounding areas to ensure the proposed development links to, enhances and mitigates impact on these assets.
 - How this has been addressed: Policy S2 (Infrastructure Planning Strategy) seeks to upgrade and expand the Green Grid network throughout the Borough. Policy M14 (Green and Blue Infrastructure and Open Space Provision) requires development to make a significant contribution to the Green and Blue Infrastructure network, including the provision of contributions for off-site improvements where this cannot be made on site. Policy M14 also requires consideration to be given to alternative green/ amenity space provision where proposals would result in the loss of this.

Main Plan Option 4: Ebbsfleet Central

- Recommendation: Appropriate design and layout should be specified as a condition of consent, as mineral resources, biodiversity and heritage assets could be lost to poorly designed development of the area.
 - How this has been addressed: The supporting text to policy E4 (Ebbsfleet Central Allocation) refers to the biodiversity and heritage assets affecting this strategic site and any proposals would need to meet the requirements of policies M5 (Designated Heritage Assets),

M6 (Historic Environment Strategy) and M15 (Biodiversity and Landscape). Policy E2 (Ebbsfleet Garden City Development Principles) refers to the Ebbsfleet Implementation Framework, the Design for Ebbsfleet Guide and masterplans which give more guidance in relation to these matters in relation to the whole Ebbsfleet Garden City area.

Main Plan Option 5: Swanscombe Peninsula

- Recommendation: Appropriate design and layout should be specified as a condition of consent as mineral resources, biodiversity and heritage assets could be lost to poorly designed development of the area.
 - How this has been addressed: Policy E6 (Land North of Swanscombe Area) refers to the need for development in this area to take account of ecology and minerals safeguarding. Any proposals would also need to meet the requirements of policies M5 (Designated Heritage Assets), M6 (Historic Environment Strategy) and M15 (Biodiversity and Landscape). Policy E2 (Ebbsfleet Garden City Development Principles) refers to the Ebbsfleet Implementation Framework, the Design for Ebbsfleet Guide and masterplans which give more guidance in relation to these matters in relation to the whole Ebbsfleet Garden City area.

Main Plan Option 6: Transport

- Recommendation: Appropriate design and layout should be specified as a condition of consent as biodiversity and heritage assets could be lost to poorly designed development of the area.
 - How this has been addressed: Any proposals would also need to meet the requirements of policies M5 (Designated Heritage Assets), M6 (Historic Environment Strategy) and M15 (Biodiversity and Landscape).

Strategic site: Hythe Street/Kent Road (now Westgate)

- Recommendation: As the site lies within an area of archaeological significance and partially within Dartford Town Centre Conservation Area, any development on the site will need to be sensitively designed.
 - How this has been addressed: Policy D4 (Westgate Allocation) reflects the key heritage features of the site. Any proposals would also need to meet the requirements of policies D2 (Central Dartford Development Principles), M5 (Designated Heritage Assets) and M6 (Historic Environment Strategy).
- Recommendation: An uncertain significant effect was recorded in relation to flood risk as the site lies within Flood Zones 2 and 3, although it is recognised that the site benefits from the protection of flood defences.
 - How this has been addressed: Policy D2 (Central Dartford Development Principles) recognises the need for development to fully mitigate flood risk and ensure that development is safe for its lifetime, where located in areas at risk of flooding. Any development would also need to comply with policy M4 (Flood Risk and Riverside Design). The recent planning application has demonstrated that flood risk issues can be overcome.

Strategic site: Littlebrook Power Station

Recommendations: As the site is not easily accessible, additional public transport infrastructure projects should be incorporated in any type of development within the area. Infrastructure projects should also emphasise the need for sustainable and active modes of transport which could utilise the potential of the riverside and should seek to minimise as far as possible contributions from traffic to air pollution in the AQMA, as well as carbon emissions. As the site lies within an area of archaeological significance and adjacent to the River Thames, any development on the site will need to be sensitively designed. Development of the site should ensure that opportunities to improve the ecology of the area, including its

connections to the wider ecological network, including the Thames. Given its proximity to the River Thames, full account of Flood risk, taking into changes in sea level and tidal regimes as a result of climate change. This may also help determine an appropriate land use (employment uses carry lower risks than housing, although it still has risks).

 How this has been addressed: Littlebrook Power Station has been granted planning permission for employment use and is therefore not included as an allocation in the Local Plan, as it is a commitment.

Preferred Policy Approach: Pattern of Development and Green Belt in the Borough

- Recommendation: Reference could be made in the Spatial Strategy to the need to ensure no adverse impacts upon designated biodiversity sites and to support the improvement of ecological networks. Similarly, it could refer to the need to ensure no harm to the historic environment, and also highlight the potential for heritage-led regeneration.
 - How this has been addressed: Policy S1 (Borough Spatial Strategy) refers to the need to protect biodiversity sites, improve ecological sites and networks, and conserve and enhance heritage assets.
- Recommendation: The Strategy could be strengthened with reference to the need to address pollution from traffic in the AQMAs, and how it intends to achieve this.
 - How this has been addressed: Policy S2 (Infrastructure Planning Strategy) acknowledges that focusing development on locations where there is access to local services and sustainable modes of transport and on development with sustainable travel provisions will help to reduce pollution in AQMAs and elsewhere.

Preferred Policy Approach: Development Delivery and Housing Location Criteria

- Recommendation: The recommendations were similar to those for the Spatial Strategy. In addition, consideration could be given in the Local Plan review for ensuring that housing is not located within areas where air pollution could damage health.
 - How this has been addressed: Policy M2 (Environmental and Amenity Protection) requires that all development must not result in unacceptable impacts, individually or cumulatively, on air quality, in particular potential impacts within or immediately adjacent to AQMAs. Policy D2 (Central Dartford Development Principles) specifically requires development in that location to improve air quality and grow the proportion of journeys made by active and public transport modes.

Preferred Policy Approach: Infrastructure

- Recommendation: Specific reference could be made to the need to avoid significant harm to the historic environment and biodiversity in the delivery of the Preferred Policy approach to infrastructure, for example through the identification and safeguarding of sensitive assets in route selection and upgrades, and the need to take into account ecological networks.
 - How this has been addressed: Any proposals would need to meet the requirements of policies M5 (Designated Heritage Assets), M6 (Historic Environment Strategy) and M15 (Biodiversity and Landscape).

Preferred Policy Approach: Town Centres and Retailing

- Recommendation: Continued consideration should be given to the potential for, and management of, flood risk within Dartford Town Centre.
 - How this has been addressed: Policy D2 (Central Dartford Development Principles) recognises the need for development to fully

mitigate flood risk and ensure that development is safe for its lifetime, where located in areas at risk of flooding. Any development would also need to comply with policy M4 (Flood Risk and Riverside Design). The Strategic Flood Risk Assessment outlines that site specific measures can be implemented on individual developments to manage the risk of flooding for sites in Central Dartford.

- Recommendation: The Preferred Policy approach could encourage further greening and biodiversity improvements for both Dartford Town Centre and Bluewater by the incorporation of additional habitats such as green roofs and walls.
 - How this has been addressed: Policy M14 (Green and Blue Infrastructure and Open Space Provision) requires development to contribute to the Green and Blue Infrastructure network and Policy M15 (Biodiversity and Landscape) expects development to protect and enhance biodiversity, including the provision of biodiversity net gain.

Preferred Policy Approach: Ebbsfleet Garden City

- Recommendation: Going forward, it would be beneficial for this Preferred Policy approach to ensure that flood defence measures are in place at Ebbsfleet Central and Swanscombe in order to reduce Flood risk.
 - How this has been addressed: Policy E6 (Land North of Swanscombe Area) refers to the need for development to take account of flood risk issues. Only a very small part of the Ebbsfleet Central strategic allocation is within a flood risk area. Policy M4 (Flood Risk and Riverside Design) will apply to development in these areas. It refers to the need for development not to constrain the future management, maintenance and upgrading of flood defences and to contribute to the delivery of the Thames Estuary 2100 plan where feasible.
- Recommendation: Mitigation measures should be put into place regarding Dartford's AQMA as it is likely that private vehicle use will increase in the short-term increasing greenhouse gas emissions in the area as it is likely that movement from both sites would be along London Road.

- How this has been addressed: Policy M2 (Environmental and Amenity Protection) requires that all development must not result in unacceptable impacts, individually or cumulatively, on air quality, in particular potential impacts within or immediately adjacent to AQMAs. Policy E2 (Ebbsfleet Garden City Development Principles) refers to the Ebbsfleet Implementation Framework which includes references to air quality.
- Recommendation: The Preferred Policy approach could include a requirement for 10% net biodiversity gain delivered, consistent with the Preferred Policy approach for the former Littlebrook Power Station.
 - How this has been addressed: Policy M15 (Biodiversity and Landscape) refers to the new national biodiversity net gain requirements.
- Recommendation: Specific mention should be made to the need to safeguard the historic environment assets and their setting in Ebbsfleet Garden City, in particular the Palaeolithic sites near Baker's Hole and Neolithic sites near Ebbsfleet, both of which are Scheduled Monuments and lie within Ebbsfleet Central strategic site.
 - How this has been addressed: The supporting text to policy E4 refers to these historic assets. Any development would need to comply with policies M5 (Designated Heritage Assets) and M6 (Historic Environment Strategy).
- Recommendation: There is mention of climate change in the entire section. Climate change is a cross-cutting issue that should be integrated into design, planning and maintenance of development.
 - How this has been addressed: Policy S3 (Climate Change Strategy) is an overarching policy which will apply to all development in the Borough. Policy E2 (Ebbsfleet Garden City Development Principles) refers to the Ebbsfleet Implementation Framework which makes references to climate change.

Preferred Policy Approach: Business Premises and Employment

- Recommendation: Going forwards, it would be beneficial for this Preferred Policy approach to ensure that flood mitigation measures in place at the former Littlebrook Power Station site [note: this is now a commitment] and at Ebbsfleet Central in order to reduce Flood risk.
 - How this has been addressed: Littlebrook Power Station has been granted planning permission for employment use and is therefore not included as an allocation in the Local Plan, as it is a commitment. Only a very small part of the Ebbsfleet Central strategic allocation is within a flood risk area. Policy M4 (Flood Risk and Riverside Design) will apply.

Preferred Policy Approach: Natural Environment and Open Space

- Recommendation: The Preferred Policy approach mentions the role that multi-functional greenspace can play in mitigating climate change. It could be further strengthened by making specific reference to the need for ecological networks to be restored and strengthened to allow for species migration and adaptation.
 - How this has been addressed: Policy S3 (Climate Change Strategy) refers to the protection and enhancement of existing habitats and making new provision to support biodiversity.

Preferred Policy Approach: Renewable Energy and Water Management

Recommendation: Paragraph H2 of the Preferred Policy approach lists a good range of measures to be taken to both mitigate and adapt to climate change. However, not all of them are clearly addressed in the section on 'Locations/Delivery methods'). For example, tree planting and the design of the public realm is important for the adaptation to climate change

through cooling effects and shelter, and also absorbing pollutants. For thoroughfares, retail areas, public transport hubs, bus stops and such, it is important that protection from both heat and heavy rainfall events is provided, which in turn will encourage people to use these services and facilities. This could be more clearly expressed in the Preferred Policy approach.

How this has been addressed: Policy S3 (Climate Change Strategy) and the supporting text bring together the various aspects of climate change into a single strategic policy. Policy M15 (Biodiversity and Landscape) provides further guidance on the use of landscaping in helping to ensure that development is resilient to the effects of climate change.

Preferred Policy Approach: Affordable Housing

Recommendation: No recommendations were identified.

Preferred Policy Approach: Housing Type and Size

Recommendation: No recommendations were identified.

Preferred Policy Approach: Gypsies, Travellers and Travelling Showpeople

Recommendation: No recommendations were identified.

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