



**Tendring Colchester Borders
Garden Community Reg 19
Development Plan Document
Sustainability Appraisal**

**Colchester Borough Council, Tendring District
Council and Essex County Council**

Final report

Prepared by LUC
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Chapter 1

Introduction

1.1 LUC was commissioned in October 2021 by Colchester Borough Council, Tendring District Council and Essex County Council to carry out Sustainability Appraisal (SA) of the Tendring Colchester Borders Garden Community Development Plan Document (DPD).

1.2 This SA Report appraises the contents of the Reg 19 DPD as well as presenting the appraisal of the options considered for inclusion in that document. This includes a number of options considered as part of the work for the draft DPD that were initially appraised in the previous iteration of the SA Report and were consulted upon alongside the draft DPD. It should be noted that this SA report does not yet reflect the findings of the Council's Integrated Water Management Strategy (IWMS) or HRA Appropriate Assessment as they were not available at the time of writing. It is understood that this evidence should become available prior to consultation on the Reg 19 DPD. Assuming that this is the case, the findings of those studies will be reflected in an updated version of this SA report that will be published alongside the Reg 19 DPD.

Background – the North Essex

Authorities' Shared Strategic Section 1

Local Plan

1.3 Tendring District Council and Colchester Borough Council adopted the North Essex Authorities' Shared Strategic Section 1 Local Plan in January and February 2021, respectively. Adoption of the Strategic Policies within the Section 1 Plan has allowed the Councils to proceed to the next phase of plan development: a DPD for the Garden Community. This builds upon the Section 1 Local Plan and contains further policies setting out how the new Garden

Community will be designed, developed and delivered in phases, in accordance with a masterplan. This SA Report relates to the Tendring Colchester Borders Garden Community Reg 19 DPD and should be read in conjunction with that document.

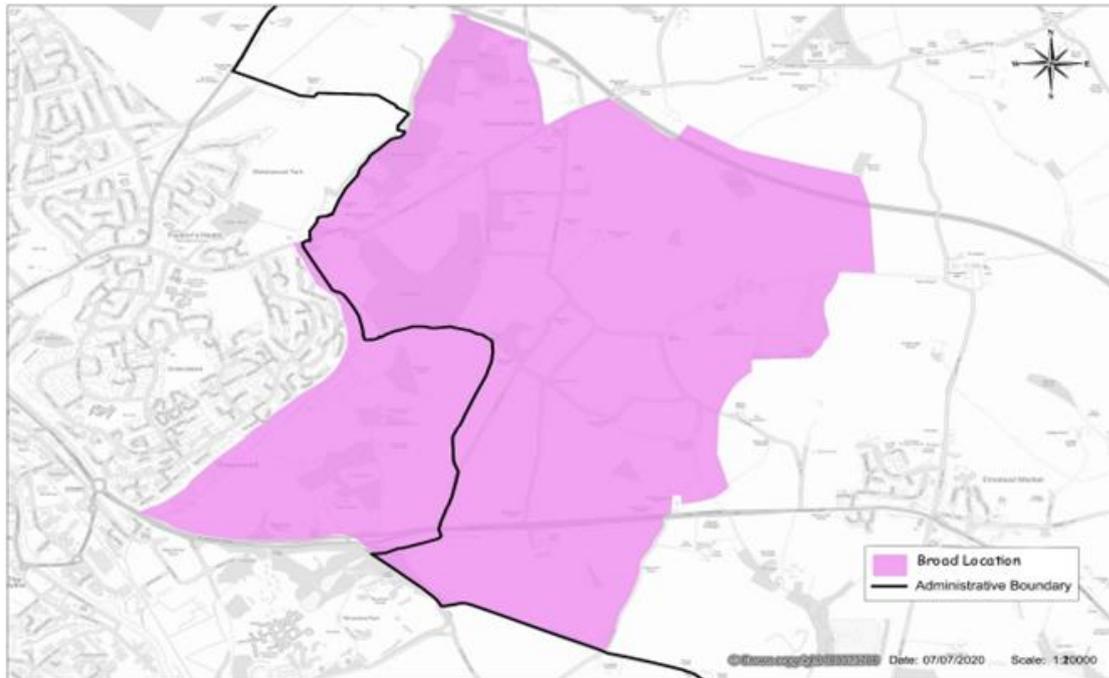
1.4 Policy SP8 of the Section 1 Local Plan allocates a new Garden Community at a defined broad location on the Tendring/Colchester border. This will deliver between 2,200 and 2,500 homes, 7 hectares of employment land and provision for Gypsies and Travellers within the Plan period (2013-2033) as part of an expected overall total of between 7,000 and 9,000 homes and 25 hectares of employment land to be delivered beyond 2033. It states that a DPD will be prepared for the Garden Community, containing policies setting out how the new community will be designed, developed and delivered in phases, in accordance with 14 principles set out in the policy.

1.5 Policy SP9 of the Section 1 Local Plan sets out that the DPD will define the boundary of the new community and the amount of development it will contain. This policy also includes principles that the DPD and any planning application will address and requirements for the design, development and delivery of the Garden Community.

The Plan area

1.6 The broad location identified for the Garden Community in the Section 1 Local Plan lies to the east of Colchester and west of the settlement of Elmstead Market within Tendring District. It takes in land that lies within the districts of both Colchester and Tendring. This broad location also takes in sections of the A120 and A133. The University of Essex Colchester Campus borders the southern area of the broad location and to the south of the A133. The location of the broad location for the Garden Community is shown in Map 10.2 of the Section 1 Local Plan and reproduced in **Figure 1.1**.

Figure 1.1: Tendring Colchester Borders Garden Community - Broad Location



Work on the DPD to date

1.7 The independent examination of the Section 1 Local Plan enabled the Planning Inspector to conclude that the Garden Community would be the most appropriate, and sustainable option for meeting the need for long-term growth in the North Essex area. The development of the Section 1 Plan and accompanying SA work considered and discounted a variety of alternative options.

1.8 Publication of an Issues and Options Report for the DPD in 2017 [See [reference 1](#)] was the first stage in the planning process of preparing a DPD for the Garden Community. This document sought to gather views on the development of the Garden Community with responses at this early stage feeding into emerging planning strategies, policies and proposals for the site. Publication and consultation on this document took place before the

examination of the Section 1 Local Plan had concluded and therefore could not reflect the final outcome of the Local Plan process, but it assisted in inviting initial thoughts and ideas and to help demonstrate that a Garden Community in this location would be a feasible project.

1.9 The 2017 Issues and Options Report included a concept plan for the Garden Community. However, the 2017 Issues and Options Report pre-dates the examination as well as modifications relating to and the subsequent adoption of the Section 1 Local Plan. The publication and period of consultation for the Issues and Options Report was also undertaken prior to the grant of planning permission for the A120-A133 Link Road. The context to the Garden Community has therefore changed since the Issues and Options work was completed.

1.10 The Section 1 Local Plan was adopted in 2021 and includes just one Garden Community crossing the Tendring Colchester border, whereas at the time the Issues and Options document was published, the Draft Local Plan was promoting three Garden Communities in North Essex and Braintree, Colchester and Tendring Councils had established a company, North Essex Garden Communities (NEGC) as a potential delivery body. In 2020, NEGC was disbanded, and Tendring and Colchester Councils began working on proposals for the single Tendring Colchester Borders Garden Community. Since the Issues and Options Report was published, Essex County Council has been successful in bidding for government funding from the Housing Infrastructure for a Link Road between the A120 and A133 and Rapid Transit System to serve the Garden Community. The route of the Link Road has been established through the grant of planning permission in 2021 and differs considerably from the indicative route shown in the earlier concept plan in the 2017 Issues and Options document and so this concept plan is no longer a reasonable alternative to consider.

1.11 Given the change in context for the preparation of the DPD, work undertaken on the DPD following the adoption of the Section 1 Local Plan effectively represented a restarting of the plan making process. The previous iteration of this SA Report (SA Report for TCBGC draft DPD (2022) [\[See](#)

reference 2]) therefore set out the intended scope and level of detail of the appraisal work required for the DPD, as well as appraising the contents of the draft DPD. In addition to presenting an appraisal of the policies included in the Reg 19 DPD, this SA Report presents an appraisal of the options considered as part of the work for the draft DPD as well additional options identified as part of the Reg 19 plan making stage.

1.12 The first step in the draft plan making process following the conclusion of the Section 1 Local Plan examination and confirmation that allocation of a Garden Community on the Colchester and Tendring border was sound was the publication of a Consultation and Engagement Strategy **[See reference 3]** in December 2020. This outlined the approach the Councils would take to engage and communicate with various audiences, to help produce the content for the draft DPD. As part of this work, a dedicated website was set up to provide information on the Garden Community. An engagement website was as set up and all feedback has been considered by the Councils – on an ongoing basis in the run-up to preparing the draft DPD.

1.13 Two reports have been published summarising feedback received to date. One report was prepared by the Councils and summarises the Council-led informal engagement activity that took place from February to October 2021. The report considered the feedback received, via the various engagement opportunities that were made available to the community and stakeholders. The other report was produced by Traverse and Community Regen who were commissioned to design and facilitate an engagement programme over the summer and autumn of 2021, in close collaboration with masterplanners Prior + Partners, as part of their visioning work and for the preparation of the masterplan layout options.

Outline of the Reg 19 DPD

1.14 The Reg 19 DPD contains detail about the growth of the Garden Community and the specific requirements that developers will be expected to follow when applying for planning permission and carrying out the development.

The structure of the Reg 19 DPD follows some overarching ‘themes’ from which a vision from the Garden Community has been drafted. These themes emerged from the main requirements for the Garden Community set out in the Section 1 Local Plan, the National Model Design Code, the main topics of interest raised and discussed during public engagement activities and wider evidence gathering that have fed into the masterplanning and policy writing process. Policies are set out to guide development at the site in relation to topics related to each theme. The policies included in the DPD are as follows:

- Policy 1: Land Uses and Spatial Approach – sets out how different parts of the site are expected to be developed and protected as well as detailing requirements for additional future masterplanning and design codes for the site.
- Policy 2: Requirements for all New Development – sets out the minimum design criteria against which the Councils will consider all development proposals for the Garden Community and any subsequent developments or changes of use.
- Policy 3: Nature – sets out requirements for the protection of habitats and designated biodiversity assets as well as the protection and enhancement of green infrastructure.
- Policy 4: Buildings, Places and Character – sets out the Councils’ expectation for the Garden Community to be unique and distinctive in its character and appearance and for the new homes to meet high standards for a range of users.
- Policy 5: Economic Activity and Employment – sets out the approach for the economic growth of the Garden Community alongside support for the education and training of its residents, with the aim of creating at least one job per new household within or in close proximity to the Garden Community.
- Policy 6: Community and Social Infrastructure – requires the provision of a full range of services and facilities at the Garden Community with the requirement for these to be delivered to align with each phase of development.

- Policy 7: Movement and Connections – requires the movement towards net zero carbon transport by 2050, with measures including services and facilities accessible by active modes in accordance with the principle of a walkable 15-minute neighbourhood and the incorporation of a new rapid transit system.
- Policy 8: Sustainable Infrastructure – sets out the approach to provide energy efficient and sustainable buildings and create places which are resilient to change and will support decisions by residents who wish to live lower impact lives.
- Policy 9: Infrastructure Delivery and Impact Mitigation – sets out the approach to achieve the required and appropriate level of infrastructure in a timely manner for the sustainable development of the Garden Community.

Sustainability Appraisal and Strategic Environmental Assessment

1.15 Under the Planning and Compulsory Purchase Act 2004, SA is mandatory for Development Plan Documents. For these documents it is also necessary to conduct an environmental assessment in accordance with the SEA Regulations (as amended) [See reference 4]. The SEA Regulations remain in force post-Brexit and it is a legal requirement for the DPD to be subject to SA and SEA throughout its preparation.

1.16 SA and SEA are tools used at the plan-making stage to assess the likely effects of the plan when judged against reasonable alternatives. SEA considers only the environmental effects of a plan, while SA considers the plan's wider economic and social effects in addition to its potential environmental impacts. SA should meet all of the requirements of the Environmental Assessment of Plans and Programmes Regulations 2004, so a separate SEA should not be required. An approach which satisfies the requirements for both SA and SEA is advocated in the Government's Planning Practice Guidance (PPG) [See

reference 5] Practitioners can comply with the requirements of the SEA Regulations through a single integrated SA process – this is the process that is being undertaken by the Councils. From here on, the term ‘SA’ should therefore be taken to mean ‘SA incorporating the requirements of the SEA Regulations’.

1.17 The SA process comprises a number of stages as, shown below.

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope.

Stage B: Developing and refining options and assessing effects.

Stage C: Preparing the Sustainability Appraisal Report.

Stage D: Consulting on the plan and the SA Report.

Stage E: Monitoring the significant effects of implementing the plan.

Meeting the requirements of the SEA Regulations

1.18 This section signposts the relevant sections of the SA Report that meet the various reporting and procedural requirements of the SEA Regulations. This information will be included in the SA Report at each stage of the SA to show how the requirements of the SEA Regulations have been met through the SA process.

1.19 SEA guidance recognises that data gaps will exist but suggests that where baseline information is unavailable or unsatisfactory, authorities should consider

how it will affect their assessments and determine how to improve it for use in the assessment of future plans. Where there are data gaps in the baseline, or reports not yet published, these are highlighted in the text. The collection and analysis of baseline data is regarded as a continual and evolving process, given that information can change or be updated on a regular basis. Relevant baseline information will be updated during the SA process as and when data are published.

Environmental Report

1.20 The following requirements of Regulation 12(1) and (2) and Schedule 2 are covered by the full SA Report produced to accompany consultation on the Local Plan constitutes the ‘environmental report’:

- Where an environmental assessment is required by any provision of Part 2 of these Regulations, the responsible Authority shall prepare, or secure the preparation of, an environmental report in accordance with paragraphs (2) and (3) of this regulation. The report shall identify, describe and evaluate 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.

1.21 The following requirements are covered in this report in **Chapter 1**, **Chapter 3**, **Appendix B** and **Appendix C**:

- An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.
- The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
- The environmental characteristics of areas likely to be significantly affected.

- 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 on the conservation of wild birds and the Habitats Directive.
- 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.

1.22 The following requirements are covered in **Chapter 4** and **Chapter 5** of this report:

- The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive effects, and secondary, cumulative and synergistic effects, 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 issues referred to in sub-paragraphs (a) to (l).
- 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.

1.23 The following requirements are covered in **Chapter 2** and **Appendix E**:

- 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.

1.24 The following requirements are covered in **5.40** of this report:

- A description of the measures envisaged concerning monitoring in accordance with regulation 17.

1.25 The requirement to provide a non-technical summary of the information provided under paragraphs 1 to 9 of the Regulations will be met by a separate non-technical summary document prepared to accompany the SA Report for the Regulation 19 DPD.

1.26 The Environmental Report at each stage of the SA will adhere to the requirement of Regulation 12 (3) that the report shall include such of the information referred to in Schedule 2 to these Regulations as may reasonably be required, taking account of:

- Current knowledge and methods of assessment;
- The contents and level of detail in the plan or programme;
- The stage of the plan or programme in the decision-making process; and
- The extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

Consultation

1.27 Regulation 12(5) requires that when deciding on the scope and level of detail of the information that must be included in the environmental report, the responsible Authority shall consult the consultation bodies. The approach to Scoping is described in **Chapter 2**.

1.28 Prior to consultation on the Reg 19 DPD, this SA report will be updated to include the findings of the Integrated Water Management Strategy (IWMS) Stage and HRA Appropriate Assessment as they were not available at the time of writing. Once the findings of these studies are finalised an updated version of this SA report will be produced to support consultation on the Reg 19 DPD. Consultation on the Reg 19 DPD is currently expected to commence in June 2023. The consultation document will be accompanied by this SA Report. This meets the requirement of Regulation 13 at the current stage that authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme. **Appendix A** presents the consultation comments that were received in relation to the SA Scoping Letter (2021) and the SA Report for the Draft DPD (2021), which took place in Spring 2022, and explains how each one has been addressed in the SA work undertaken since then.

1.29 Regulation 14 requires that other EU Member States are consulted where the implementation of the plan or programme is likely to have significant effects on the environment of that country. The Local Plan is not expected to have significant effects on other EU Member States.

Taking the environmental report and the results of the consultations into account in decision-making (relevant extracts of Regulation 16)

1.30 Regulation 16 requires provision of the following information on decision-making. These requirements will be addressed after the DPD is adopted:

- When the plan or programme is adopted, the public and any countries consulted under Reg. 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
 - The measures decided concerning monitoring.

Monitoring

- Regulation 17(1) requires that the responsible Authority shall monitor the significant 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. **5.40** of the SA Report proposes measures to be taken to monitor the likely significant effects of the DPD.

Structure of the SA Report

1.31 This chapter describes the background to the production of the DPD and the requirement to undertake SA. The remainder of this SA Report is structured as follows:

Chapter 2 describes the approach that is being taken to the SA of the DPD.

Chapter 3 describes the relationship between the DPD and other relevant plans, policies and programmes; summarises the social, economic and environmental characteristics of the Garden Community area and identifies the key sustainability issues.

Chapter 4 presents the findings of the SA for the policies and options considered for the DPD including the key vision themes and masterplan options.

Chapter 5 presents the appraisal of the cumulative effects of the DPD.

Chapter 6 proposes indicators for monitoring the potential sustainability effects of the DPD.

Chapter 7 presents the conclusions of the SA of the DPD and describes the next steps to be undertaken.

Appendix A presents a summary of the consultation comments received in relation to the SA work to date.

Appendix B reviews national and international plans, policies and programmes of relevance to the undertaking of the SA.

Appendix C presents baseline information for the Garden Community area.

Appendix D summarises the cumulative effects of the draft DPD and how these differ from the Reg 19 DPD SA findings.

Appendix E presents an audit trail of the options considered as part of the preparation of the DPD and the Council's reasons for selecting or rejecting each one.

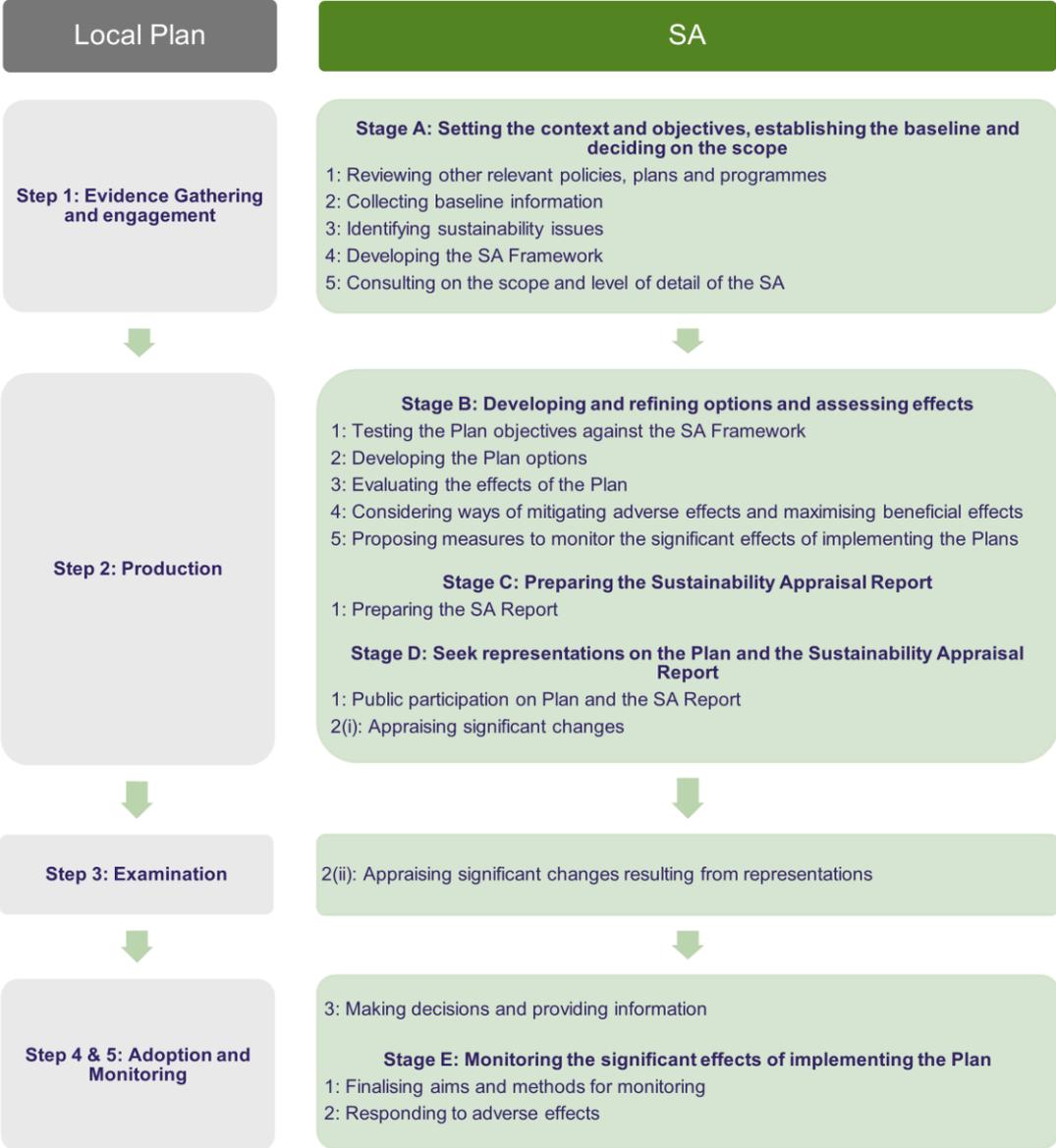
References lists the various reports and other sources of information cited in the SA Report.

Chapter 2

Methodology

2.1 In addition to complying with legal requirements, the approach being taken to the SA of the Garden Community DPD is based on current good practice and the guidance on SA/SEA set out in the Government's PPG. This calls for SA to be carried out as an integral part of the plan-making process. **Figure 2.1** sets out the main stages of the plan-making process and shows how these correspond to the SA process.

Figure 2.1: Corresponding stages in plan-making and SA



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

SA Stage A: Scoping

2.3 The Scoping stage of SA involves understanding the social, economic and environmental baseline for the plan area as well as the sustainability policy context and key sustainability issues. These are then used to inform the appraisal framework as follows.

Review other relevant policies, plans and programmes to establish policy context

2.4 The plan is not prepared in isolation; rather it is prepared within the context of other policies, plans and programmes. The SEA Regulations require the Environmental Report to describe the relationship of the plan with other relevant plans and programmes. It should also be consistent with environmental protection legislation and support the attainment of sustainability objectives that have been established at the international, national, and regional/sub-regional levels.

2.5 A review was therefore undertaken of other policies, plans, and programmes at the international, national, regional and sub-regional levels that were considered to be relevant to the scope of the DPD. This review was initially presented by the SA Scoping Report [See reference 6]. The original scoping work was overtaken by the draft DPD and the SA work prepared for that document in February 2022. This SA Report updated the review of policies, plans, and programmes presented in the SA 2017 Scoping Report. Given the time that has passed since the preparation of the previous iteration of the SA Report this work has been revisited and **Chapter 3** and **Appendix B** present an updated review of policies, plans and programmes.

Collect baseline information to establish sustainability context

2.6 Information on existing environmental, social and economic conditions in the plan area provides the baseline against which the plan's effects can be assessed in the SA and monitored during the plan's implementation.

2.7 Baseline information can also be combined with an understanding of drivers of change that are likely to persist regardless of the plan to understand the likely future sustainability conditions in the absence of the plan.

2.8 The SEA Regulations require the Environmental Report to describe relevant aspects of the current state of the environment and how they are likely to evolve without the plan. An understanding of this likely future, together with the assessed effects of the plan itself, allows the SA to report on the likely cumulative effects of the plan, another requirement of the SEA Regulations.

2.9 The SEA Regulations require assessment of effects in relation to the following 'SEA topics': biodiversity, population, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage), landscape, and the inter-relationship between these. Baseline information was therefore collected in relation to the SEA topics as well as additional sustainability topics covering broader socio-economic issues such as housing, access to services, crime and safety, education and employment. This reflects the integrated approach that is being taken to the SA and SEA processes. The baseline information for the Garden Community area originally presented in the SA Scoping Report was reviewed as part of the SA Report for the draft DPD. A further update of the baseline evidence has been undertaken as part of the preparation of this report. The updated baseline information for the plan area is presented in **Appendix C**.

Identify key sustainability issues

2.10 The baseline information also allows the identification of existing sustainability issues, including problems as required by the SEA Regulations.

2.11 Key sustainability issues facing the Garden Community area and an analysis of their likely evolution without the DPD are detailed in **Chapter 3**.

Develop the SA framework

2.12 Development of an SA framework is not a requirement of the SEA Regulations but is a recognised way in which the likely sustainability effects of a plan can be transparently and consistently described, analysed and compared. The SA framework comprises a series of sustainability objectives and supporting criteria that are used to guide the appraisal of the policies and proposals within a plan.

2.13 The SA Scoping Report prepared in November 2017 included an SA framework with 22 SA objectives which, at that stage, was proposed as a means of appraising the draft DPD and reasonable alternatives considered as part of the preparation of the plan. However, having undertaken a review of policies, plans, and programmes and baseline evidence of relevance to the DPD and considered the Additional Sustainability Appraisal prepared for the Section 1 Local Plan [**See reference 7**], which was published after the 2017 SA Scoping Report, it was decided that the headline SA objectives from the Additional SA of the SA of the Section 1 Local Plan provided an appropriate framework to undertake the appraisal work for the Garden Community DPD. This provides consistency with the Additional SA of the higher tier Section 1 Local Plan and avoids the potential for repeating some of the shortcomings identified with earlier SA work for the Section 1 Local Plan.

2.14 A review of other policies, plans, and programmes, together with identification of the key sustainability issues facing the Garden Community area,

has helped to inform a review of the appraisal questions (the SA assessment criteria) included in the SA framework as a means of guiding the appraisal of the DPD and reasonable alternatives against the headline SA objectives. The review work for the SA objectives involved a number of changes to the appraisal questions that appeared in the SA Framework for the Additional SA of the Section 1 Local Plan. A small number of changes to the appraisal questions have also been made following the analysis of consultation responses received in relation to the SA Report on the draft DPD. This is explained in more detail in **Chapter 3**.

2.15 The updated and refined SA framework for the appraisal of the DPD (including changes made to the appraisal questions) is presented in **Chapter 3**.

Consult on the scope and level of detail of the SA

2.16 Public and stakeholder participation is an important element 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.

2.17 The SEA Regulations require the statutory consultation bodies (the Environment Agency, Historic England, and Natural England) to be consulted “when deciding on the scope and level of detail of the information that must be included” in the SA Report. The scope and level of detail of the SA is governed by the SA framework.

2.18 As noted above, as part of the restarting of the DPD preparation following the adoption of the Section 1 Local Plan, the decision was made to make use of the SA framework used for SA of that document for the appraisal of the DPD, after reviewing and amending the supporting criteria that are used to guide the appraisal of policies and proposals. As such, while consultation on the SA Scoping Report for the initial DPD work was undertaken as part of the Issues

and Options consultation between 13th November 2017 and 22nd January 2018, the results of this consultation are not presented in this report as the Scoping information has been superseded by that presented in this report.

2.19 In October 2021 the Councils issued a scoping letter to the three statutory consultees seeking comment on this approach. **Appendix A** lists the comments that were received on the scope of the SA from the statutory consultees in autumn 2021 and describes how each one has been addressed in this SA Report. In light of the comments received, a number of amendments were made to the review of policies, plans, and programmes, the baseline information, key sustainability issues and the SA framework. Consultation on the SA Report for the draft DPD was undertaken in spring 2022. Comments received as part of this period of consultation are also detailed in **Appendix A**.

SA Stage B: Developing and refining options and assessing effects

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

2.21 In relation to the SA Report, Part 3 of the SEA Regulations 12 (2) requires that:

“The 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.”

2.22 Schedule 2 (h) of the SEA Regulations requires that the Environmental Report includes a description of:

“(h) an outline of the reasons for selecting the alternatives dealt with.”

2.23 The SEA Regulations require that the alternative policies considered for inclusion in a plan that must be subject to SA are ‘reasonable’, therefore 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 (NPPF)).

2.24 The SA findings are not the only factors taken into account when determining a preferred option to take forward in a plan. Indeed, there will often be an equal number of positive or negative effects identified by the SA 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.

2.25 The following sections describe the process that was followed in identifying and appraising options for the DPD. The alternative options were identified by the Council based on the most up-to-date evidence and taking into account information received during consultation exercises. The stages of option development and the accompanying SA work carried out are described below.

Identifying and appraising the options for the spatial framework and policies

2.26 The SA Scoping Report (2017) was prepared to be consulted upon at the same time as the Issues and Options [See reference 8] version of the DPD. In addition to reporting the usual information on the intended scope and level of detail of the SA, it also presented an appraisal of the various elements of the DPD as drafted for consultation at that stage. This included an appraisal of the vision, themes and principles and Development Concept option (i.e. the policy content in the concept as well as the site boundary).

2.27 The SA Scoping Report explained that broad boundary options relevant to the Garden Community were explored within the SA of the Section 1 Local Plans. Development Concept options were not developed within the DPD relevant to these and as such, at that stage, alternative options did not exist to the same level of detail as the Development Concept included in the Issues and Options DPD. For this reason, reasonable alternatives were not identifiable at that stage.

2.28 The work undertaken on the DPD in 2017 has effectively been overtaken by adoption of the Section 1 Local Plan. The draft DPD effectively represented a restarting of the plan preparation process, rather than an evolution from the previously consulted upon options. As such, a recounting of the options presented in the SA work undertaken prior to the work for the draft DPD and a summary of prior findings, is not included in this report.

2.29 In determining the approach for the spatial distribution of development at the Garden Community (Policy 1 in the draft DPD), the Councils, taking into account both technical evidence and the views expressed through public engagement undertook a comprehensive masterplanning process informed by work from masterplanners Prior + Partners. The work undertaken was used to arrive at and subsequently considered a range of alternative options and approaches. These included strategies that involved development expanding over a wider footprint onto land south of the A133 and/or east of the new link

road as well as development at the lower and higher end of the 7,000 to 9,000 home range set out in the adopted Section 1 Local Plan.

2.30 The Councils also considered different ways of accommodating higher and lower densities of development across different parts of the site, alternative approaches to 'green buffers' around the edge of the site and different approaches to accommodating 'centres', identifying locations for employment and routing the Rapid Transit System through the site. The Councils also considered different approaches to recognising the special character of Crockleford Heath, and different levels of protection that could be given to the land and property in that area.

2.31 Further options identified as part of the consultation on the draft DPD have also been subject to SA as part of this report. Further details are provided in **Chapter 4** about each of these options and their expected effects.

2.32 Appendix E of this report presents an audit trail of the options considered for the Reg 19 DPD and the reasons for selecting or rejecting each option for inclusion in that document.

SA Stage C: Preparing the Sustainability Appraisal Report

2.33 This SA Report describes the process that has been undertaken to date in carrying out the SA of the DPD. It sets out the SA findings for the policy approaches in the Reg 19 DPD as well as the reasonable alternative policy options considered. Likely significant effects, both positive and negative, have been presented, taking into account the likely secondary, cumulative, synergistic, short, medium and long-term and permanent and temporary effects.

2.34 The SA findings are set out in **Chapter 4** and **Chapter 5** of this SA Report along with information on how other policies within the DPD or the Section 1

Local Plan may help to mitigate negative effects and maximise the benefits of the policy options.

SA Stage D: Consultation on the DPD and the SA Report

2.35 Information about consultation on the SA that has already taken place at earlier stages of plan-making has been provided above. The Councils are now inviting comments on the Reg 19 Tendring Colchester Borders Garden Community DPD. These documents are expected to be published on the Councils' websites for a period of consultation commencing in June 2023. Comments relating to the SA will be taken into account during the Examination of the Local Plan by a Planning Inspector to be appointed by the Secretary of State, and in the remaining stages of preparation for the DPD and the SA process.

SA Stage E: Monitoring implementation of the Local Plan

2.36 Draft recommendations for monitoring the likely significant social, environmental and economic effects of implementing the DPD are included in **5.40** of this SA Report and these will be updated as appropriate during later stages of the SA.

Appraisal methodology

2.37 Reasonable alternative options for the spatial framework of development and policies included in the DPD document were appraised against the SA objectives in the SA framework (see **The SA framework** in **Chapter 3**), with

symbols being attributed to each option to indicate its likely effects on each SA objective as shown in. Where a potential positive or negative effect is uncertain, a question mark was added to the relevant symbol (e.g. +? or -?) and the symbol was colour coded in line with the potential positive, negligible or negative effect (e.g. green, yellow, orange, etc.).

2.38 The likely effects of options need to be determined and their significance assessed, which inevitably requires a series of judgments to be made. The appraisal has attempted to differentiate between the most significant effects and other more minor effects through the use of the symbols shown in **Table 2.1**. 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 or policy 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.

Table 2.1: Key to symbols and colour coding used in the SA

Symbol and Colour Coding	Description
++	Significant positive effect likely.
++/-	Mixed significant positive and minor negative effects likely.
+	Minor positive effect likely.
+/-	Mixed minor effects likely.
++/--	Mixed significant effects likely.
-	Minor negative effect likely.
--/+	Mixed significant negative and minor positive effects likely.
--	Significant negative effect likely.
0	Negligible effect likely.

Symbol and Colour Coding	Description
?	Likely effect uncertain.

Difficulties and data limitations

2.39 The SEA Regulations, Schedule 2(8) require the Environmental Report to include:

“...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.”

2.40 A number of difficulties and limitations arose in the course of the SA as follows:

- Much of the baseline information (see Chapter 3 and Appendix C) which was used to inform the appraisal of the draft DPD was based on data from the 2011 census. This information is now relatively out of date but is still the most reliable source of information for many topics. As new information is made available from the 2021 census this will be used to inform updates to the baseline for the IIA.
- The reasonable alternatives identified by the Council for the policies in the draft DPD and those inferred from the consultation questions included in that document were not worked up to the same level of detail as the policies themselves. As such the same level of detail could not be included for the appraisal of reasonable alternatives.

Chapter 3

Sustainability context

Introduction

3.1 Schedule 2 of the SEA Regulations requires information on (numbering relates to the specific numbered list in Schedule 2):

1. “an outline of the contents and main objectives of the Plan and its 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”.

3.2 An outline of the DPD was provided in **Chapter 1**. The SEA Regulations require the SA Report to describe the environmental protection objectives established at international and national levels (and how these have been taken into account in plan preparation/appraisal). This requirement is addressed through the remainder of this chapter with more detail provided for international and national plans and programmes of most relevance provided in **Appendix B**. For lower tier plans and programmes, SEA Regulations require the SA Report to include an outline of the relationship of the DPD to these. This requirement is addressed later in this chapter.

Relationship with other relevant plans or programmes

3.3 The DPD is not prepared in isolation and must be in conformity with a range of international, national and sub-national plans and programmes. The document 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 heritage. It must also conform to environmental protection legislation and the sustainability objectives established at an international, national and regional level. 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. Directly applicable EU law now no longer applies to the UK and the UK is free to repeal EU law that has been transposed into UK law.
- 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. 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 Areas; and the abolition of Community Infrastructure Levy (CIL) and Section 106.

- Levelling-up and Regeneration Bill – the bill was introduced in May 2022 and sets out the direction for planning and makes provisions to support the levelling-up agenda. It seeks to streamline the planning process whilst attaching greater weight to development plans. It also aims to improve infrastructure delivery with a new levy system and improve alignment between plans to address cross-boundary issues. Once enacted this bill will have implications on planning.

3.4 It is also likely that UK and sub-national climate change policy will change as public awareness and prioritisation of the threat of climate change grows, as illustrated by the increasing number of local authorities, including Colchester Borough and Tendring District, that have declared a climate emergency.

International

3.5 Former EU 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’) were transposed into the Strategic Environmental Assessment (SEA) Regulations [See reference 9] and Habitats Regulations . [See reference 10] Following the UK’s departure from the EU, these Regulations still apply and require environmental assessment processes to be undertaken in relation to the DPD . These processes should be undertaken iteratively and integrated into the production of the plan in order to ensure that any potential negative environmental effects (including on European-level nature conservation designations) are identified and can be mitigated.

3.6 There were also a wide range of other EU Directives relating to issues such as water quality, waste and air quality, most of which are transposed into UK law through Acts, Regulations and national-level policy. The UK has now fully

left the EU and therefore EU Directives no longer apply to the UK. The relevant Regulations are discussed in **Appendix B**.

National

3.7 There is an extensive range of national policies, plans and programmes that are of relevance to the DPD and SA process. A pragmatic and proportionate approach has been taken with regards to the identification of key national policies, plans and programmes, focusing on those that are of most relevance. A summary of the main objectives of the NPPF and PPG of relevance to DPD and SA is provided below. In addition, the main sustainability objectives of other national plans and programmes which are of most relevance for the DPD and SA are provided in **Appendix B**.

The National Planning Policy Framework and Planning Practice Guidance

3.8 The NPPF [[See reference 11](#)] is the overarching planning framework which provides national planning policy and principles for the planning system in England. The NPPF was originally published in March 2012, revised in July 2018, updated in February 2019 and again in July 2021. Further updates to the NPPF are currently being consulted upon, however the most recent update to the NPPF places an increased focus on design quality. This includes for sites as well as for places as a whole. The terminology included in the Framework on protecting and enhancing the environment and promoting a sustainable pattern of development has been revised. Furthermore, revisions are included in relation to policies which address opting out of permitted development, the use of masterplans and design codes and the important contribution of trees in new developments.

3.9 The NPPF states that in addition to being positively prepared, justified and effective, plans will be considered sound if they are capable of:

“enabling the delivery of sustainable development in accordance with the policies in (the) Framework.”

3.10 In addition to contributing to the achievement of sustainable development the NPPF also requires plans to be prepared positively in a way that is ‘aspirational but deliverable’. This means that opportunities for appropriate development should be identified in order to achieve net gains across the three overarching objectives of sustainable development: that is to say achieving the economic, social and environmental objectives of the planning system. Significant adverse impacts on these objectives should be avoided however and, where possible, alternative options which reduce or eliminate these types of impacts should be taken forward. Where this is not possible mitigation followed by compensatory measures should be pursued.

3.11 National policy within the NPPF of most relevance to the DPD has been summarised below.

3.12 The Government has also set out long term goals for managing and improving the environment in its 25 Year Environment Plan [\[See reference 12\]](#). The document seeks to influence planning at a local level and therefore will be relevant to the scope of the SA and production of the DPD. Reference has been included within each topic below to the relevant text from the environment plan. In addition, the Environmental Improvement Plan 2023 [\[See reference 13\]](#) builds on this, setting out how the Government will work with landowners, communities and businesses to deliver each of their goals for improving the environment, matched with interim targets to measure progress.

3.13 Additionally, the Environment Act 2021 [\[See reference 14\]](#) introduced statutory requirements in relation to biodiversity net gain, as described in the Biodiversity section below.

Population growth, health and well-being

3.14 The NPPF includes as part of its social objective the promotion of “strong, vibrant and healthy communities” by:

- “ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and
- by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being.”

3.15 Ultimately planning policies and planning decision making should “aim to achieve healthy, inclusive and safe places”.

3.16 The document states that strategic policies should set out the pattern, scale and quality of development and make sufficient provision for “housing (including affordable housing) ... [as well as] community facilities (such as health, education and cultural infrastructure)”. Policies should reflect “the size, type and tenure of housing needed”. This policy approach is to include but should not be limited to housing requirements relating to affordable homes, families with children, older people, students, people with disabilities, service families, travellers, those who rent their homes and people wishing to commission the construction of their own homes. At major developments providing new housing planning policies and decisions should expect at least 10% of new provision to be delivered for affordable home ownership subject to conditions and exemptions.

3.17 To help to diversify opportunities for builders, promote a better mix of site sizes and increase the number of schemes that can be built-out quickly to meet housing need, the NPPF states that at least 10% of the sites allocated for housing through a local authority’s plan should be on sites no larger than one hectare unless it can be demonstrated that there are strong reasons why this target cannot be achieved.

3.18 Where there is an identified need, development of sites not already allocated for housing to provide entry-level homes suitable for first-time buyers is to be supported by local planning authorities unless such need is already to be met at other locations within the authority area. These sites should comprise of entry-level homes that offer one or more types of affordable housing.

3.19 The document also promotes a theme of enhancing healthy and safe communities which is to be achieved by creating places which “promote social interaction (and) enable and support healthy lifestyles”.

3.20 As part of this approach social, recreational and cultural facilities and services that the community needs should be provided guided by planning policies which:

- “plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services;
- support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community;
- guard against the unnecessary loss of valued facilities and services.”

3.21 Plan making through the guidance of the NPPF recognises the important role of access to open spaces and other facilities which provide opportunities for sport and physical activity has in terms of health and well-being of communities. The importance of delivering a sufficient choice of school places to meet the needs of existing and new communities is also recognised in the document and local planning authorities should take a “proactive, positive and collaborative approach to meeting this requirement”.

3.22 The NPPF also sets out that the standard method provided in national planning guidance should be used to undertake a local housing need assessment identifying the minimum number of homes needed. Unmet need from neighbouring areas will also need to be taken into account as part of the

calculation. The Housing Delivery Test Measurement Rule Book [See reference 15] sets out how the measurement of housing delivery in the area of relevant plan-making authorities is calculated. It should be noted that the housing requirements for Colchester and Tendring have been established through the examination and adoption of the Section 1 Local Plan – but that these requirements will be the subject of ongoing review as the Councils' shared and individual Local Plans are, themselves, reviewed.

3.23 A Green Future: Our 25 Year Plan to Improve the Environment sets out goals for improving the environment over 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. The document identifies six key areas upon which action will be focused. Those of relevance to the topics of population growth, health and well-being are using and managing land sustainably; and connecting people with the environment to improve health and well-being. These two key areas are of relevance to the DPD 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 well-being:
 - Help people improve their health and well-being 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.

Economy

3.24 The NPPF contains an economic objective to “help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity”.

3.25 It also requires that planning seeks to “create the conditions in which businesses can invest, expand and adapt” with policies required to “set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth”. Policies addressing the economy should also seek “to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment”.

3.26 Planning policies are also required specifically to address support for the rural economy. 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, while the diversification of the rural economy and promotion of sustainable rural tourism and leisure developments is also supported.

3.27 The NPPF also supports the role of town centres as functioning at the heart of local communities. This support is required to provide for a “positive approach to [town centres’] growth, management and adaptation”. Included within this support is a requirement to “allocate a range of suitable sites in town centres to meet the scale and type of development needed, looking at least ten years ahead”.

Transport

3.28 The NPPF requires that “transport issues should be considered from the earliest stages of plan-making”. The scale, location and density of development should reflect “opportunities from existing or proposed transport infrastructure”.

To help reduce congestion and emissions, improve air quality and public health the planning system should focus significant development “on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes”. The framework also requires that planning policies support an appropriate mix of uses across an area to further help reduce the need to travel as well as the provision of high-quality walking and cycling network.

3.29 While the framework promotes the use and development of sustainable transport networks it also requires that “where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development” should be identified and protected.

Air, land and water quality

3.30 The NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued soil and the economic and other benefits of the best and most versatile agricultural land. Policies should also prevent new and existing development from “contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability”.

3.31 The document also requires that strategic policies should seek to make the most effective use of land in meeting local requirements making as much use as possible of previously-developed or ‘brownfield’ land. Furthermore, policies should “support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land”.

3.32 The NPPF also sets out an approach to help ensure that there is a sufficient supply of minerals to enable the provision of the infrastructure, buildings, energy and goods needed in England. To this end, planning policies should provide for the extraction of mineral resources of local and national

importance and safeguard locations of specific minerals resources of local and national importance. The approach set out in the NPPF also includes encouraging the prior extraction of minerals, if it is necessary for non-minerals development to occur, where practical and environmentally feasible.

3.33 A Green Future: Our 25 Year Plan to Improve the Environment [See **reference 16**]: Of the key areas in the document around which action will be focused, those of relevance in terms of the protection of air, land and water quality are using and managing land sustainably; recovering nature and enhancing the beauty of landscapes; and increasing resource efficiency, and reducing pollution and waste. The three key areas of relevance to the DPD 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.

Climate change adaptation and mitigation

3.34 The NPPF contains as part of its environmental objective a requirement to mitigate and adapt to climate change, “including moving to a low carbon economy”. The document also states that the “planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change”. To achieve these aims new development should

be planned to ensure appropriate adaptation measures are included (including green infrastructure) and should be designed, located and orientated as to help to reduce greenhouse gas emissions.

3.35 The revised framework also requires that development is directed away from areas which are at highest existing or future risk of flooding. Where development is required in such areas, the “development should be made safe for its lifetime without increasing flood risk elsewhere”. The NPPF also states that all major development and development in areas at risk of flooding should incorporate sustainable drainage systems.

3.36 In relation to coastal change in England planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Furthermore, plans should “reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast”.

3.37 A Green Future: Our 25 Year Plan to Improve the Environment [**See reference 17**]: The key areas in the document of relevance in terms of responding to climate change 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.

Biodiversity

3.38 A further requirement of the NPPF’s environmental objective is that the planning system should contribute to protecting and enhancing the natural environment including helping to improve biodiversity, and using natural resources prudently. In support of this aim the framework states that local planning documents should “identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks” and should also “promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity”.

3.39 The framework requires that plans should take a strategic approach in terms of “maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries”.

3.40 A Green Future: Our 25 Year Plan to Improve the Environment [**See reference 18**]: The key areas in the document of relevance in terms of the protection and promotion of biodiversity 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.
- 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.

3.41 Additionally, the Environment Act 2021 [See reference 19] introduced a requirement that all applications for the development of land will have to deliver a 10% biodiversity net gain above the ecological baseline for the application site. The Act also introduced Local Nature Recovery Strategies, which will guide the delivery of biodiversity net gain projects. The spatial extent of strategies is to be determined by the Secretary of State. The implementation of these new initiatives will help to ensure that new development contributes towards the delivery of net gains in biodiversity, so that the environment, across the DPD area and surroundings, is improved as the Garden Community is built out. The requirements of the Environment Act will come into force in 2023 following a two-year transition period to enable local planning authorities, developers and others to prepare for the proposed requirement.

Historic environment

3.42 Of relevance to the approach of the planning system to the historic environment the NPPF contains an environmental objective to contribute to the protection and enhancement of the built and historic environment. The document also sets out a strategy to seek “the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay and other threats”. Such a strategy is required to take into consideration the desirability of sustaining and enhancing the significance of heritage assets and bringing them into viable use.

3.43 It should also take into account the wider benefits of conserving the historic environment, the contribution new development can make in terms of character and distinctiveness and the opportunity for the historic environment to contribute to this character and distinctiveness. Local authorities should also maintain or

have access to a historic environment record which is to be supported by up to date evidence.

Landscape

3.44 The Local Plan will be required to have consideration for the conservation and enhancement of landscape character. The NPPF includes as part of its approach to protecting the natural environment, recognition for the intrinsic character and beauty of the countryside, and the wider benefits to be secured from natural capital and ecosystem services. Importantly, great weight is to be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty.

3.45 As part of the approach to achieving well-designed places the NPPF states that planning policies and decisions should ensure that developments “are sympathetic to local character and history, including the surrounding built environment and landscape setting”.

3.46 A Green Future: Our 25 Year Plan to Improve the Environment [**See reference 20**]: The key area in the document of relevance in terms of the conservation and enhancement of landscape character is 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 plans, policies and programmes

3.47 Below the national level there are further plans and programmes which are of relevance to the Local Plan and SA process. These plans and programmes sit mostly at the sub-regional, county and local authority level. Importantly this includes the Section 1 Local Plan for North Essex and Tendring Section 2 Local Plan, as well as the adopted Local Plan for Colchester comprising the Core Strategy, Site Allocations DPD and Development Policies DPD. These documents set the planning policy direct for both local authority areas. The Colchester Section 2 Local Plan is currently being examined and will replace the existing Local Plan for the Borough once adopted.

3.48 Colchester Economic Development Strategy 2015 to 2021 and Tendring District Council Economic Strategy 2020-24 support job creation, business development, sustainable growth and inward investment across both local authority areas. Pathways for reducing emissions across both local authorities and to commit the councils to achieve net zero by 2030 are set out in the Tendring Climate Emergency Action Plan 2020-2023 and Colchester Borough Council Climate Emergency Action Plan 2021-23.

3.49 At a county level, the Essex Minerals Local Plan, Essex and Southend-on-Sea Waste Local Plan and Essex Local Transport Plan set the approach for minerals extraction and safeguarding, waste sites and transport in the DPD area. The vision and objectives for the delivery of green infrastructure across Essex are set out in the Essex Green Infrastructure Strategy 2020.

Baseline information

3.50 Baseline information provides the context for assessing the sustainability of the DPD. It also provides the basis for identifying trends, predicting the likely effects of these documents 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.

3.51 Schedule 2 of the SEA Regulations requires data to be gathered on biodiversity, population, human health, flora, fauna, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the inter-relationship between the above factors. As an integrated SA and SEA is being carried out, baseline information relating to other sustainability topics has also been included; for example, information about housing, education, transport, energy, waste and economic growth. As with the review of relevant plans, policies and programmes, a small number of amendments have been made to the baseline information since it was originally presented in the SA Scoping Report in 2017 in order to update it, drawing on the most recent evidence sources. The updated baseline information is presented in **Appendix C**.

Key sustainability issues

3.52 The updated review of plans, policies and programmes and baseline information reviews was used to identify the key sustainability issues relevant to the plan area.

3.53 In recognition of the SEA Regulation requirement (Schedule 2) that the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme must be described in the Environmental Report, the section below describes the likely evolution of each key sustainability issue if the DPD was not to be adopted and development at the site is delivered only in line with the existing, adopted local and national policy.

Economy

Economy: description of sustainability issue and supporting evidence

3.54 The broad area is predominantly rural i.e. comprising open countryside, rural buildings and scattered dwellings but is in close proximity to the University of Essex, Colchester town with the A120 and A133 passing through the area to the north and south respectively.

3.55 There are significant economic ‘anchors’ in the wider vicinity such as the University of Essex and employment provision at the Hythe; however links need to be made to utilise these.

State of environment in absence of the plan

3.56 Despite emerging policy aiming to ensure services and facilities are integrated into the Garden Community as expected by the Strategic Section 1 Local Plan, the Plan can ensure that sufficient retail and employment premises are integrated into any new community through an effective framework regarding the eventual form of the development. The Plan can ensure that provision will be planned to complement, rather than displace, existing local service provision in the town of Colchester. This may not be the case in the absence of the Plan.

Economy: description of sustainability issue and supporting evidence

3.57 The site is close to the established employment centre of Colchester and notable the University of Essex at the site’s southern boundary. The site has

good access to Harwich Port (part of Freeport East) to the east via the A120 which will be improved following construction of the A133/A120 link road.

State of environment in absence of the plan

3.58 The growth of the University of Essex will also provide an opportunity for the Garden Community to capture future associated employment growth. Utilising the existing strengths of the existing employment providers and centres is a key opportunity for the Garden Community. The Plan can facilitate this opportunity, which perhaps would not be realised through alternative development approaches.

Economy: description of sustainability issue and supporting evidence

3.59 Jobs linked to homeworking will be physically associated with the homes of residents and therefore also on site; in relation to these jobs, the design of housing will be crucially important (The North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017)).

State of environment in absence of the plan

3.60 The planning of the Garden Community provides a unique opportunity to deliver truly innovative forms of emerging utility-related technologies, including but not limited to state of the art telecommunications infrastructure which could provide an ultra-fast broadband service for existing and future residents. This could otherwise not be forthcoming within the Garden Community in the absence of the Plan.

Economy: description of sustainability issue and supporting evidence

3.61 The COVID-19 pandemic has had a dramatic effect on the number of people claiming out-of-work benefits and commuting/working patterns, in addition to issues related to increasing pressures on recreation and open spaces and the supply of housing.

State of environment in absence of the plan

3.62 In addition to providing an opportunity to capture future employment growth, the Garden Community provides the opportunity to support the delivery of development that supports home working in Tendring and Colchester. This may include the incorporation of appropriate internal space provision at new homes and securing infrastructure to provide an ultra-fast broadband. This could otherwise not be forthcoming within the Garden Community in the absence of the Plan.

Health

Health: description of sustainability issue / supporting evidence

3.63 Public access to natural greenspace (ANGSt) is an issue within the wider area, although the site borders the Salary Brook nature reserve to the west. Access to natural greenspace will be of importance to promote more active and healthier lifestyle choices among residents at the Garden Community and in the surrounding areas.

State of environment in absence of the plan

3.64 The Plan has the opportunity to suitably include accessible natural green space throughout the design and layout of the Garden Community. This might not be the case in the absence of a plan-led approach, or otherwise not be given due weight in favour of marketable land uses.

Health: description of sustainability issues / supporting evidence

3.65 Tendring District is the most deprived authority within the County of Essex. Life expectancy is 11.7 years lower for men and 10.5 years lower for women in the most deprived areas of Tendring than in the least deprived areas. Furthermore, life expectancy is 8.6 years lower for men and 8.0 years lower for women in the most deprived areas of Colchester than in the least deprived areas.

State of environment in absence of the plan

3.66 In essence, the development of a Garden Community will provide housing, employment, more local facilities and greenspace within Tendring and Colchester. Therefore, the Plan has the opportunity to improve the surrounding communities giving them greater access to essential infrastructure. In the absence of the Plan, it cannot be certain whether this would be forthcoming.

Health: description of sustainability issue / supporting evidence

3.67 There are no existing GP surgeries within the Garden Community area, the closest being in the surrounding villages and town of Colchester. Serving

specific communities, the capacities of these facilities are unlikely to cumulatively serve the Garden Community. This is unless the provision of primary healthcare is delivered in alternative ways, as currently being advocated by the NHS – such as digital channels and through minimising the causes of ill health through the incorporation of Health Towns principles within the Garden Community.

State of environment in absence of the plan

3.68 In facilitating inclusive facilities, the Plan can ensure that a new Garden Community can incorporate premises for local centres, flexible community space that can be utilised for health services, sports provision and opportunities for active travel. In the absence of the Plan, it cannot be certain whether this would be forthcoming.

Housing

Housing: description of sustainability issue / supporting evidence

3.69 There is a need for affordable housing to meet projected requirements for Tendring and Colchester.

State of environment in absence of the plan

3.70 The Plan can help to ensure the provision of affordable housing, in significant numbers, as part of the mix of development in a comprehensively planned new settlement. It is noted that the Section 1 Plan includes the requirement for the delivery of 30% affordable homes at the Garden

Community, however, the inclusion of this requirement in the DPD will provide greater certainty in relation to the achievement of this delivery.

3.71 This can be considered comparatively unlikely to be forthcoming without a plan led approach – leaving an ongoing shortfall that would need to be addressed through alternative means outside of the Garden Community.

Housing: description of sustainability issue / supporting evidence

3.72 Suitable Gypsy and Traveller accommodation proposals have not been forthcoming through the Local Plan call-for-sites mechanisms of Colchester Borough and Tendring District Councils to meet longer-term post 2033 needs.

State of environment in absence of the plan

3.73 The Section 1 of Colchester and Tendring's Local Plan includes Policy SP8 which ensures that Garden Community in this location would require accommodation provision of Gypsy and Travellers. The Garden Community Plan can ensure that such provision is located with the interests of the envisaged new community in mind.

Biodiversity

Biodiversity: description of sustainability issue / supporting evidence

3.74 The broad area contains a SSSI (Bullock Wood) which is likely to require sensitive consideration in regard to preservation and enhancement.

3.75 The Local Nature Reserves of Salary Brook and Welsh Wood are in close proximity to / within the broad area.

3.76 There are existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches.

State of environment in absence of the plan

3.77 A plan-led approach to strategic development can ensure that existing features of biodiversity are protected and integrated into the Garden Community's green infrastructure. Comparatively, this is less likely to be the case through more traditional strategic development approaches.

Biodiversity: description of sustainability issue / supporting evidence

3.78 As identified within the HRA of the Strategic Section 1 (and the Section 2 Local Plans), a Recreational disturbance Avoidance and Mitigation Strategy (RAMS) will be needed to ensure that the level of growth does not have likely significant effects on Natura 2000.

State of environment in absence of the plan

3.79 The relationship between areas of biodiversity interest and human activity through recreation are often incompatible in terms of wildlife conservation. A plan led approach can ensure that such management and the identification of land for recreational purposes is ensured. However, both Colchester and Tendring Councils have adopted the Essex Coast RAMS approach which identifies a programme of measures to mitigate the impact of projected

development on protected areas. The Councils have the means of securing financial contributions towards these measures.

Landscape

Landscape: description of sustainability issue / supporting evidence

3.80 Natural England's National Character Area Profile: Northern Thames Basin, in which this area lies, indicates that the rural urban fringe should be conserved and enhanced through the spatial planning process and through good design in development. despite this, the topography of the land indicates benefits to the proposals in the form of integrating development into a natural context.

3.81 There are existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches.

State of environment in absence of the plan

3.82 A plan-led Garden Community can ensure that sensitive natural features are integrated, protected and enhanced through a framework approach to design and layout. This is not unique to Garden Communities and can be expected to be ensured through more traditional approaches to development.

Landscape: description of sustainability issue / supporting evidence

3.83 There are a number of sensitive receptors associated with the surrounding area and large scale development has the potential to impact on the rural character of the small settlements surrounding and within the site.

State of environment in absence of the plan

3.84 A plan-led Garden Community, adhering to Garden City principles and the Garden Community Charter, can ensure better integration of development within the open countryside. This would otherwise be less likely to be the case through more traditional development approaches.

Soil quality

Soil quality: description of sustainability issue / supporting evidence

3.85 The Garden Community site area contains Grade 1 Agricultural Land (determined 'excellent' by Natural England) along much of the eastern boundary.

State of environment in absence of the plan

3.86 The loss of agricultural land is inevitable through any strategic scale development. In the absence of the Plan, it can be considered likely that there would be a similar loss of such land. Given the scale of the growth associated

with the Garden Community, it is unlikely that the development could occur entirely on brownfield within Tendring and Colchester.

Education and skills

Education and skills: description of sustainability issue / supporting evidence

3.87 In Colchester, there are longer term forecasted capacity issues relating to primary school reception places in the areas of Colchester north, Colchester southwest and Stanway, Wivenhoe and Colchester rural south. There is an identified expected shortfall in secondary school Year 7 capacity in Colchester in 2023/24. However, there is no identified shortfall in the forecasted capacity for 2021/22 and 2022/23 as well as for all years forecasted after 2023/24. There is less forecasted secondary school Year 7 capacity in Thurstable with expected shortfalls in many of the upcoming reporting years up to 2030.

3.88 In Tendring, there are longer term forecasted capacity issues relating to primary school reception places in the areas of Little Clacton / Tendring / Thorpe / Weeley, Brightlingsea / Elmstead and Frinton / Walton. There is also an identified expected shortfall in secondary school Year 7 capacity in Tendring in the areas of Clacton, Colne, Harwich and Manningtree and surroundings across many of the upcoming reporting years up to 2030 **[See reference 21]**.

State of environment in absence of the plan

3.89 A plan led approach enables an 'infrastructure first' approach to delivering the Garden Community, through effective working with the commissioning authority. It is more likely that a less holistic approach to ensuring adequate school capacity would result in the absence of the Plan.

Climate and energy consumption

Climate and energy consumption: description of sustainability issue / supporting evidence

3.90 Both Councils have declared a Climate Emergency.

3.91 UKCP18 is the latest generation of national climate projections for the United Kingdom and outlines the most recent scientific evidence on projected climate changes. This enables the LPA to plan for projected climate changes. UKCP18 includes projections based on difference scenarios. The headline projections under all scenarios are:

- By the end of the 21st century, all areas of the UK are projected to be warmer, more so in summer than in winter.
- Rainfall patterns across the UK are not uniform and vary on seasonal and regional scales and will continue to vary in the future.
- Future climate change is projected to bring about a change in the seasonality of extremes.
- Future increases in the intensity of heavy summer rainfall events. For urban areas particularly, this will impact on the frequency and severity of surface water flooding.

3.92 We can continue to expect increases to extreme coastal water levels driven mainly by increases in mean sea level rise, although we cannot rule out additional changes in storm surges. Regarding CO2 emission reductions, both Tendring and Colchester have a higher percentage than the Essex average (24%) at 26% and 29% respectively.

State of environment in absence of the plan

3.93 While the delivery of new development is likely to have adverse effects relating to climate change in the short term as construction occurs and sites users need to travel to the area, the provision of the Garden Community offers a significant opportunity for the utilisation of renewable energy sources and the introduction of higher building standards for energy efficiency. The Plan can ensure that renewable energy generation and energy efficiency measures are included within the development that would otherwise be unlikely to be integrated in its absence.

Access

Access: description of sustainability issue / supporting evidence

3.94 Colchester Borough's self- containment rate (share of residents who also work within the Borough) was 69% in 2011, with 24,850 employed residents leaving the Borough to work. Of these 25% go to Greater London, 15% to Tendring District, 15% to Braintree District and 10% to Chelmsford City.

State of environment in absence of the plan

3.95 A plan-led approach, together with the delivery model of the Garden Community, can ensure the integration of rapid transit. It is unlikely that this would be ensured through any planning application without such a requirement either physically or through sufficient contributions. It is noted that there is an award of Housing Infrastructure Fund funding to deliver works for rapid transit. However, it may be that the award would be withdrawn if there was no plan in place to give additional certainty about the housing the funding is to enable.

Access: description of sustainability issue / supporting evidence

3.96 There are highway network efficiency issues on a number of strategic inter-urban routes which are operating at or near to capacity.

State of environment in absence of the plan

3.97 It is considered that the Plan can ensure an appropriate level of services and facilities and the incorporation of methods of active travel and rapid transit at the site. This can ensure that residents take fewer trips outside the Garden Community for convenience shopping and day to day needs. This can offset traffic implications on existing roads as much as possible. It is thought that without this requirement established within the Plan, planning applications are unlikely to ensure provision to the same level.

Access: description of sustainability issue / supporting evidence

3.98 The area is well located in terms of existing access and the presence of strategic roads and those that permeate the broad area and those eastern parts of Colchester.

State of environment in absence of the plan

3.99 Development at the scale proposed can ensure that such issues are overcome and solutions become viable. These are best consulted on and ensured through a plan-led system. This cannot be expected in the absence of the Plan.

Access: description of sustainability issue / supporting evidence

3.100 Proportionately more households own at least 1 car or van within Colchester than the regional and national figures at 43.8%.

State of environment in absence of the plan

3.101 The Plan can include an approach to limit parking and reduce the number of trips undertaken by private vehicles through the incorporation of active travel routes, rapid transit and car clubs. In the absence of the Plan, these initiatives are less likely to be delivered.

Access: description of sustainability issue / supporting evidence

3.102 For a number of reasons, access to a variety of services and facilities can be an issue for Colchester residents. The English Indices of Multiple Deprivation (IMD) 2019 measure social inclusion by considering and scoring a whole range of issues, from access to certain facilities, to income and employment. The score provides an indication of deprivation within an area. The Borough ranks 181st out of 317 districts on the IMD (rank 1 being the most deprived). Colchester ranks 4th in comparison to 12 other Essex authorities in terms of average score, with Tendring the more deprived Essex authority. Despite this, there are areas in Colchester where deprivation exists and which contrast with the surrounding more affluent areas. Colchester has one LSOA in the 10% most deprived in the country, namely Greenstead, which is adjacent to the broad area of search for the Garden Community.

3.103 The IMD also presents findings in relation to the accessibility of local services across the country through the Barriers to Housing and Services

Domain. Colchester contains 12 Lower Super Output Areas which are amongst the 10% most deprived in the country in relation to this measure. Tendring contains four Lower Super Output Areas which falls within the 10% most deprived in relation to this measure.

State of environment in absence of the plan

3.104 A plan-led approach to the delivery of the Garden Community can help to encourage social inclusion. This can be achieved through the appropriate design of new communities and the ensuring the delivery of adequate community infrastructure and services.

Access: description of sustainability issue / supporting evidence

3.105 Vacancy levels in Colchester town centre have increased from 10.5% of total ground floor premises to 14.5% [See reference 22]. This is above the national average of 12%. Retail capacity is anticipated to decline by 3,900 sqm in Colchester from structural changes in the retail sector and the economic implications of the COVID-19 pandemic, all of which could have an adverse impact on the vitality and viability of Colchester town centre.

State of environment in absence of the plan

3.106 The Garden Community is in relatively close proximity to Colchester town centre. A detailed, plan led approach to the Garden Community through the DPD, will allow for an adequate level of service provision at the site while limiting the potential for new development to adversely affect the viability of Colchester town centre.

Sustainable transport

Sustainable transport: description of sustainability issue / supporting evidence

3.107 The percentage of households owning at least 1 car or van within Tendring District at 45.3%, which is slightly higher than national and regional statistics. Colchester is also higher than the regional and national figures at 43.8%. The relatively high level of car ownership in both local authority areas is likely to mean that there is a high level dependency on trips made by private vehicle with implications in terms of carbon emissions and air pollution.

3.108 The presence of the Great Eastern Mainline and rail links at Hythe exist as a rapid public transport link to Colchester. The existing strategic and local bus networks currently set down and pick-up in close proximity to the site with a bus interchange located at the University campus. Within the Colchester Borough Council Local Plan, provision is made for a dedicated bus corridor to support development in North Colchester.

State of environment in absence of the plan

3.109 A plan-led approach, together with the delivery model of the Garden Community, can ensure the integration of rapid transit within the wider area and help to limit the potential car dependency to become ingrained at the new development. This approach will help to limit the negative contribution the development makes in terms of carbon emissions and air pollution. It is unlikely that this would be ensured through any planning application without such a requirement either physically or through sufficient contributions. Funding has been secured via the Housing Infrastructure Fund to implement works for rapid transit at the Garden Community site. Without the added certainty provided by the plans set out in the DPD, it may be that this funding would be removed.

Air quality

Air quality: description of sustainability issue / supporting evidence

3.110 There is likely to be an increase in air pollution associated with development in the broad location and resultant traffic movements into Colchester town due to a number of AQMAs.

State of environment in absence of the plan

3.111 A plan-led approach, and the delivery model established in the Plan, enables development to be supported by effective sustainable transport means designed to minimise vehicle emissions.

3.112 This approach would be unlikely to be forthcoming in the absence of the Plan, which can also ensure the promotion of active modes through significant green infrastructure.

Water

Water: description of sustainability issue / supporting evidence

3.113 All waterbodies in the Essex Combined Management Catchment and Anglian TraC Management Catchment are failing in terms of achieving good chemical status. Improvements to water quality are needed to meet the EU Water Framework Directive (2000/60/EC) target of 'good ecological status' and 'good chemical status' by 2027.

3.114 Opportunities for improving the status of water bodies should be identified as part of development proposals. Typical water body improvements might be creating 'natural' riverbanks, overcoming barriers to fish movement or providing sustainable drainage systems.

3.115 The Colchester Water Cycle Study (WCS) concluded that, allowing for the planned resource management of Anglian Water Services South Essex Resource Zone, Colchester would have adequate water supply to cater for growth over the plan period. However, the WCS identified that there are long term limitations on further abstraction from the raw water resources supplying the Borough and that there is a drive to ensure the delivery of sustainable development for Colchester. The Integrated Water Management Strategy (IWMS) Stage 1 report undertaken for the Section 1 Local Plan concluded for the three Garden Communities in North Essex considered as part of that plan, that there are workable wastewater options within the limits of conventional treatment which would not impact on the Water Framework Directive status of receiving waterbodies.

3.116 Water bodies altered by human activity may be classified as Heavily Modified (HMWB) or Artificial (AWB) and have an objective to achieve 'good potential'. Salary Brook to the west of the Garden Community site is within a Nitrate Vulnerable Zone and has a 'moderate' overall status.

State of environment in absence of the plan

3.117 As stated in the Plan, investment in this essential area of infrastructure will be required to facilitate the improvements needed and ensure adequate ongoing maintenance. It is uncertain whether this infrastructure would be forthcoming from development proposals in the absence of the Plan.

3.118 The delivery of the Garden Community also provides an unprecedented opportunity to integrate innovative sustainable drainage systems into the design of new development which will help to ensure higher levels of water quality in the area. It is unlikely that this would be the case to the same degree through

development proposals in the absence of the Plan. The IWMS Stage 2 report has been commissioned to inform future work as part of the DPD process. This reporting should be used to inform future stages of masterplanning for the site.

Flood risk

Flood risk: description of sustainability issue / supporting evidence

3.119 The National Planning Policy Framework seeks to avoid inappropriate development in areas at risk of flooding, but where development is necessary, to ensure that it is safe and does not increase flood risk elsewhere. Significant levels of flood risk have been identified along river stretches in Colchester. This is the case at the site's western boundary associated with Salary Brook.

State of environment in absence of the plan

3.120 In the absence of the Plan there is unlikely to be any significant difference in how areas of flood risk are considered within the Garden Community. That said, the design and layout of the Garden Community can ensure that existing water courses are maximised as features of a blue infrastructure interest throughout the site. The delivery of the Garden Community provides an unprecedented opportunity to integrate innovative sustainable drainage systems into the design of new development which will help to limit increases in flood risk in the area. It is unlikely that this would be the case to the same degree through development proposals in the absence of the Plan.

Historic environment

Historic environment: description of sustainability issue / supporting evidence

3.121 The site contains a small number of Listed Buildings which should be preserved and moderate to high potential for below ground heritage assets dating to the Late Iron Age/Roman period, a moderate to high potential for medieval remains, and a moderate potential for prehistoric remains. Similarly, within the site there is a low to moderate potential for Saxon archaeology, and a moderate to high potential for post-medieval remains (notably field boundaries).

State of environment in absence of the plan

3.122 In the absence of the Plan, such features would have to be protected through suitable schemes both in regard to designations and their settings. The Plan can further ensure that enhancements to assets are sought where possible.

Utilities

Utilities: description of sustainability issue / supporting evidence

3.123 Due to the likely nature and scale of the proposed Garden Community, utility provision does not exist within the site currently.

3.124 There is capacity in the medium pressure gas network in the region, but local low pressure upgrades will be required.

3.125 Broadband provision will help to support the Garden Community's target of 'one job per home' through effective home working.

State of environment in absence of the plan

3.126 The development of a new Garden Community provides significant opportunities to not only provide new infrastructure but also the opportunity to deliver innovative forms of infrastructure and ensure their integration from the outset, reducing and avoiding the need for disruptive retrofitting which could otherwise be the case in the absence of the Plan.

Existing communities

Existing communities: description of sustainability issue / supporting evidence

3.127 Few existing services and facilities are within the boundaries of the site at present.

State of environment in absence of the plan

3.128 Despite policy in regard to ensuring services and facilities are integrated into the Garden Community existing in the form of the Strategic Section 1 Local Plans, the DPD can ensure that a more coordinated approach is taken to incorporate sufficient retail, employment, social and community premises into any new community through an effective framework regarding the eventual form of the development. The Plan can ensure that provision can need to be planned to complement, rather than displace, existing local service provision in local town centres. This may not be the case in the absence of the Plan.

The SA framework

3.129 As described in the Methodology chapter, an analysis of plans, policies, and programmes and baseline evidence informed identification of key sustainability issues facing the DPD. It was concluded from these issues that the headline sustainability objectives within the SA framework used to for the Additional SA of the Section 1 Local Plan were also appropriate for the SA of the DPD. The supporting appraisal questions were reviewed and refined to ensure they were relevant to the site specific context of the DPD as opposed to the sub-regional scale relevant to appraise the Section 1 Local Plan.

3.130 This resulted in a small number of updates to the appraisal questions included as a means to interrogate the options for the plan in relation to each of the SA objectives. The appraisal questions are not intended to be exhaustive but help to guide the appraisal of plan proposals. Where changes have been made to the appraisal questions these are shown as strikethrough and underlined text. The updated SA framework is presented in the section below.

SA Objective 1: To create safe environments which improve quality of life, community cohesion

Appraisal questions

- Does it seek to improve / supply community facilities for young people?
- Does it seek to increase cultural activities or suitable development to stimulate them? Does it seek to support cultural identity and social inclusion?

- Will there be measures to increase the safety and security of new development and public realm where residents can partake of frequent and unplanned social interactions?
- Will it support design which reduces the potential for crime or anti-social behaviour?

SA Objective 2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

Appraisal questions

- Will it increase the range and affordability of housing to support the growing population and for all social groups?
- Does it respond to the needs of an ageing population?
- Does it seek to provide appropriate rural affordable housing?
- Will it deliver well designed and sustainable housing?
- Will it contribute to meeting Gypsy and Traveller pitch requirements of the GTAA?
- Will it help to deliver a suitable mix of housing sizes, types and tenures to meet local needs?

SA Objective 3: To improve health/reduce health inequalities

Appraisal questions

- Will it ensure access to and prevent overburdening of health facilities, including primary, acute and emergency services, including through the provision of new infrastructure of this type?
- Will it ensure access to sport and recreation facilities, open space and accessible natural green space, including through the provision of new infrastructure of this type?
- Will it encourage access by walking or cycling?

SA Objective 4: To ensure and improve the vitality and viability of centres

Appraisal questions

- Does it seek to prevent loss of retail and other services or deliver these types of services in locations where they are accessible to a large number of residents?
- Does it support the creation of new viable centres while promoting and enhancing the viability of existing centres?
- Does it seek to locate development close to centres?
- Does it seek to locate development within easy public travelling distance to town centres?
- Does it seek to improve public transport networks to town centres?

SA Objective 5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

Appraisal questions

- Will it improve the delivery of a range of employment opportunities to support the growing population?
- Will it tackle employment associated deprivation?
- Will it enhance the area's potential for tourism?
- Will it promote development of the ports?
- Will it support business innovation, diversification, entrepreneurship and changing economies while building on links to nearby employment sites?
- Does it seek to improve links to and enhance existing training and learning facilities and/or create more facilities?
- Will the employment opportunities available be mixed to suit a varied employment skills base?
- Will it provide new residents with appropriate space and infrastructure (including ultra-fast broadband) as to allow for homeworking?

SA Objective 6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

Appraisal questions

- Will development have a potential impact on a national, international or European designated site (SPA, SAC, Ramsar, SSSI)?
- Will it maintain and enhance sites otherwise designated for their nature conservation interest?
- Will it conserve and enhance natural/semi natural habitats, including those that are not presently designated?
- Will it conserve and enhance species diversity, and in particular avoid harm to indigenous BAP priority species?
- Will it result in biodiversity net gain?

SA Objective 7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

Appraisal questions

- Will it increase and/or improve the availability and usability of sustainable transport modes, including infrastructure for electric vehicles?
- Will it seek to encourage people to use alternative modes of transportation other than private vehicle?

- Will it support the viability of existing public transport and lead to the integration of different transport modes?
- Will it improve rural public transport?
- Does it seek to increase the uptake or viability of walking and cycling as methods of transportation, through new infrastructure or integration?
- Will it support an increased level of self-containment in the area through the incorporation of services and facilities and employment floorspace to meet a high proportion of residents needs in the locality?

SA Objective 8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

Appraisal questions

- Will it contribute positively to reduce social exclusion by ensuring access to jobs, shopping, services and leisure facilities for all?
- Does it seek to concentrate development and facilities where access via sustainable travel is greatest?
- Does it seek to minimise congestion at key destinations / areas that witness a large amount of vehicle movements at peak times?
- Would the scale of development require significant supporting transport infrastructure in an area of identified need?
- Will it ensure adequate school places (through expansion / new facilities) and early years provision to support growth as well as supporting good access to these types of facilities?

- Will it ensure the required improvements to utilities infrastructure?
- Will it ensure access to and necessary increases in capacity to GP services?
- Will it ensure access to and necessary increases in capacity to acute healthcare services?
- Will it provide a suitable amount of sports, recreational, leisure and open space facilities?

SA Objective 9: To conserve and enhance historic and cultural heritage and assets and townscape character

Appraisal questions

- Will it protect and enhance designations, features and areas of historical, archaeological and cultural value in both urban and rural areas?
- Will it have a negative impact on the significance of a designated historic environment asset or its setting?
- Does it seek to enhance the range and quality of the public realm and open spaces?
- Will it reduce the amount of derelict, degraded and underused land?
- Does it encourage the use of high quality design principles to respect local character?
- Will / can any perceived adverse impacts be reduced through adequate mitigation?

SA Objective 10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

Appraisal questions

- Will it reduce emissions of greenhouse gases by reducing energy consumption?
- Will it lead to an increased generation of energy from renewable sources?
- Will it encourage greater energy efficiency?
- Will it improve the efficient use of natural resources, minimising waste and promoting recycling?
- Will it support the siting and design of development as to adapt to climatic change through measures such as the incorporation of green infrastructure, building orientation and choice of materials?
- The contribution promoting more sustainable modes of transport can make to limiting carbon emissions is addressed through SA objective 7: sustainable travel.

SA Objective 11: To improve water quality and address water scarcity and sewerage capacity

Appraisal questions

- Will it lead to no deterioration on the quality of water bodies?
- Will water resources and sewerage capacity be able to accommodate growth?

- Does it seek to support the recycling of rainwater and greywater?

SA Objective 12: To reduce the risk of fluvial, coastal and surface water flooding

Appraisal questions

- Does it promote the inclusion of Sustainable Drainage Systems (SuDS) in new developments and will their integration be viable?
- Does it seek to avoid development in areas at risk of flooding (fluvial, coastal, surface water) and where this is not possible ensure that development is safe?
- Does it seek to avoid increasing flood risk (fluvial, surface water, groundwater) in areas away from initial development?

SA Objective 13: To improve air quality

Appraisal questions

- Will it improve, or not detrimentally affect air quality along the A12, A120 or A133?
- Will it help to limit traffic within AQMAs within Colchester and surroundings?
- Does it seek to improve or avoid increasing traffic flows generally?

SA Objective 14: To conserve and enhance the quality of landscapes

Appraisal questions

- Will landscapes sensitive to development be protected?
- Will it lead to rural expansion or development outside development boundaries/limits that increases coalescence with neighbouring settlements?
- Is the scale / density of development in keeping with important and valued features of the local landscape and the existing rural character of the site and surrounding small settlements?
- Will it help to conserve and enhance existing natural landscape features within the site?
- Will it help to conserve and enhance the existing rural urban fringe and support the integration of development within the natural context?

SA Objective 15: To safeguard and enhance the quality of soil and mineral deposits

Appraisal questions

- Will it avoid the loss of high quality agricultural land?
- Will it avoid the sterilisation of mineral deposits / is the site within a Minerals Safeguarding Area (MSA)?
- Will it support or lead to the remediation of contaminated land, avoiding environmental pollution or exposure of occupiers or neighbouring land uses to unacceptable health risk?

Chapter 3 Sustainability context

- Will it support the efficient use of land resources, by achieving appropriate densities of development thereby limiting the need for the development of greenfield land?

Chapter 4

SA Findings for Individual Components of the Reg 19 DPD

4.1 This chapter presents the sustainability findings for the policies included in the Reg 19 DPD alongside any reasonable alternatives considered. The policies have been presented in this report to follow the order they are included in the Reg 19 DPD.

4.2 Appendix E summarises the cumulative effects for the draft DPD and how these differ from the Reg 19 DPD SA findings. **Appendix E** then presents all policies that are included in the DPD as well as the reasonable alternatives. It also sets out the Councils' reasons for discounting those options that were not preferred. For many of the policies the Councils have considered an approach that would involve no new policy in the DPD to address the topic in question and rely on existing national and local policy. Given that the NPPF and adopted policies in the Section 1 Plan form part of the future baseline against which the DPD policies have been assessed, options of this nature do not constitute a reasonable alternative for the purposes of the SA. Therefore, these options have not been appraised.

Key vision themes and principles and objectives

4.3 The vision for the future of the Garden Community DPD is set out in relation to five key vision themes. The Vision is included to be relatively high level and aspirational in nature. It provides an image of the Garden Community once it is built out as a place where better ways of living, working and playing can be achieved. The Garden Community is to be a place where a high quality of placemaking is achieved, where development allows for improvements in

biodiversity and local character, while also providing appropriate infrastructure and a suitable level of transport connections to meet the needs of local people. The vision for each theme is supported by a number of principles and objectives. The sustainability effects of the key vision themes are presented in **Table 4.1** with a description of the effects presented below the table.

4.4 The achievement of the principles and objectives in the DPD will ultimately be dependent upon the requirements of the policies in the document and from this, the conformity of development proposals for the Garden Community with these requirements. As such, a proportionate and relatively light touch approach to the assessment of the principles and objectives has been taken. The SA has considered the compatibility or incompatibility of the principles and objectives in relation to each SA objective as presented in **Table 4.2** with a summary of the findings included below the table.

Table 4.1: Sustainability effects of key vision themes

Key Vision Themes	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10	SA11	SA12	SA13	SA14	SA15
Nature	+	-	+	0	-	+	+	0	+	+	+	+	+	+	0
Movement and connections	+	0	+	0	0	0	+	+	0	+	0	0	+	0	0
Community and social infrastructure	+	0	+	0	0	0	+	+	0	+	0	0	+	0	0
Buildings, places and character	+	+	0	0	+	0	0	0	+	0	0	0	0	+	0
Sustainable infrastructure	0	+	+	0	0	+	+	0	0	+	0	+	+	+	0

4.5 The key vision themes are expected to have mostly positive effects given their high level and aspirational nature. Positive effects are identified when the aim of the principles and objectives directly aligns with that of the SA objective, as outlined below:

- Key vision theme “Nature” addresses the outdoor natural environment of the Garden Community, including green infrastructure, and how this will benefit both people and wildlife. Given the potential benefits of open space and green infrastructure provision in relation supporting social interactions between new residents and providing space for physical activity minor positive effects are identified in relation to SA objectives 1: safety and community cohesion and 3: health. The incorporation of green infrastructure will also provide habitat space for wildlife and support travel by more sustainable means limiting the reliance on private vehicles, while also contributing to the adaptation to climate change. Therefore, minor positive effects are also expected in relation to SA objectives 6: biodiversity and geological diversity, 7: sustainable travel, 10: energy efficiency and climate change, 12: flood risk and 13: air quality. The protection of existing areas of open space and green infrastructure assets are likely to preserve the aesthetic quality of the Garden Community area and therefore minor positive effects are also expected in relation to SA objectives 9: historic environment and townscape and 14: landscape. This Key Vision Theme is likely to have minor negative effects in relation to SA objectives 2: housing and 5: economy given that areas that are considered acceptable for development associated with housing and employment opportunities may more be limited considering the approach to preserving much of the Garden Community as open space.
- Key vision theme “Buildings, Places and Character” addresses the delivery of well-designed homes and spaces for a range of activities and employment opportunities. This key vision theme is likely to have minor positive effects in relation to SA objectives 1: safety and community cohesion, 2: housing, 5: economy, 9: historic environment and townscape and 14: landscape. The positive effects recorded reflect the support for the creation of distinctive places within which high quality landscapes and architecture are given importance. This approach is likely to help instil a

sense of ownership among new residents as the Garden Community grows, while also incorporating a range of housing types and employment opportunities that will meet a range of needs and skills.

- Key vision theme “Community and Social Infrastructure” addresses community health and wellbeing through the provision of community spaces, schools and sport and leisure facilities as well as infrastructure stewardship. Given the key vision theme’s direct alignment with SA objectives 1: safety and community cohesion, 3: health and 8: services and infrastructure, minor positive effects are recorded. The provision of these types of infrastructure and ensuring their long term maintenance through an appropriate approach to stewardship, will be of importance in terms of creating a sense of ownership at the Garden Community for new residents. The provision of necessary supporting infrastructure will also be important to support the creation of a relatively self-contained community from which the need to travel longer distances is limited. This could have benefits in terms of the emissions of greenhouse gases and air pollutants. A minor positive effect is therefore expected in relation to SA objectives 7: sustainable travel, 10: energy efficiency and climate change and 13: air quality.
- Key vision theme “Movement and Connections” addresses mobility measures such as active travel routes and the prioritisation of rapid public transit. Therefore, the approach of this Key vision theme is likely to help promote walking and cycling and modes which are expected to have less adverse effects in relation to greenhouse gas emissions and air pollution. As such, this key vision theme is likely to have minor positive effects in relation to SA objectives 7: sustainable travel, 10: energy efficiency and climate change and 13: air quality. This key vision theme directly addresses encouraging travel by more active modes and this is likely to help improve public health in the area. It may also help ensure access to the local centres in the Garden Village and services and facilities for a higher number of residents (including those without access to a car) which will help improve the satisfaction of residents with their local environment. Minor positive effects are therefore expected in relation to SA objectives 1: safety and community cohesion, 3: health, 7: vitality and viability of centres

and 8: services and facilities. No negative effects are expected in relation to the SA objectives.

- Key vision theme “Sustainable Infrastructure” addresses sustainable living, including the provision of green infrastructure and the incorporation of building solutions which will support sustainable lifestyle choices for the Garden Community’s residents. Considering the support for green infrastructure in the key vision theme, which is likely to provide space for residents to partake in healthier lifestyles and travel by more sustainable modes, as well as supporting habitat provision and connectivity in the area, minor positive effects are expected in relation to SA objectives 3: health, 6: biodiversity and geological diversity, 7: sustainable travel, 10: energy efficiency and climate change and 13: air quality. This approach is also likely to help preserve natural features which contribute to the setting and character of the Garden Community and therefore minor positive effects are also recorded in relation to SA objectives 12: flood risk and 14: landscape. The approach of the key vision theme to incorporate building solutions to support residents in terms of their decisions to live more sustainability is likely to involve energy efficiency measures and materials at the new homes in the Garden Community. This would further help achieve SA objectives 10 as well as supporting the delivery of a higher quality of housing stock in the area. Therefore, a minor positive effect is also recorded in relation to SA objective 2: housing.
- The key vision themes address a range of topics that will be of importance as the new Garden Community is delivered. However, it is worth noting that promoting more efficient use of land (including the re-use of brownfield land), preserving higher value agricultural soils and ensuring the extraction of viable mineral resources before built development occurs have not been included. The nature of the Garden Community at a large greenfield site, will make many of these objectives difficult to achieve.

Table 4.2: Compatibility between the DPD principles and objectives and the SA objectives

Principles and Objectives	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10	SA11	SA12	SA13	SA14	SA15
A place shaped by nature and landscape	Compatible	Incompatible	Compatible	Neutral	Incompatible	Compatible	Compatible	Neutral	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Neutral
A place with thriving ecology and biodiversity	Neutral	Incompatible	Compatible	Neutral	Incompatible	Compatible	Neutral	Compatible	Compatible	Neutral	Neutral	Neutral	Neutral	Compatible	Neutral
A place with a productive and climate resilient natural landscape	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral	Neutral	Compatible	Compatible	Compatible	Neutral	Compatible	Compatible
A place where housing is accessible, affordable and inclusive	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral
A place with great homes	Neutral	Compatible	Compatible	Neutral	Neutral	Incompatible	Neutral	Compatible	Incompatible	Compatible	Neutral	Neutral	Neutral	Incompatible	Neutral
A place with a thriving local economy	Neutral	Neutral	Neutral	Compatible	Compatible	Incompatible	Compatible	Neutral	Incompatible	Neutral	Neutral	Neutral	Neutral	Incompatible	Compatible
A place that is vibrant and active	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral	Compatible	Compatible	Compatible	Neutral	Neutral	Neutral	Compatible	Neutral	Neutral
A place with distinctive identity	Neutral	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral	Neutral	Neutral	Compatible	Neutral
A place where everyone can feel at home	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral
A place where it's easy to be healthy and happy	Compatible	Neutral	Compatible	Neutral	Neutral	Neutral	Compatible	Compatible	Compatible	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral
A place where everyone can learn	Compatible	Neutral	Neutral	Compatible	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
A place to play and have fun	Compatible	Neutral	Compatible	Neutral	Neutral	Neutral	Compatible	Compatible	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
A place where long term stewardship is considered from the outset	Compatible	Neutral	Compatible	Neutral	Neutral	Neutral	Neutral	Compatible	Neutral	Neutral	Neutral	Neutral	Neutral	Compatible	Neutral

Principles and Objectives	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10	SA11	SA12	SA13	SA14	SA15
A place where active and sustainable travel is the natural choice	Compatible	Neutral	Compatible	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral
A place with rapid, efficient and cost effective public transport	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral
A connected place	Neutral	Neutral	Compatible	Neutral	Neutral	Neutral	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral
A place where people have priority	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral
A place where the energy supply is sustainable, smart and future proofed	Neutral	Neutral	Neutral	Neutral	Neutral	Incompatible	Neutral	Neutral	Incompatible	Compatible	Neutral	Neutral	Neutral	Incompatible	Neutral
A place designed for the impacts while minimising its contribution to climate change	Neutral	Neutral	Compatible	Neutral	Neutral	Compatible	Compatible	Neutral	Neutral	Compatible	Compatible	Compatible	Neutral	Compatible	Neutral
A place that optimises resource efficiency and recycling across the whole development lifecycle	Neutral	Neutral	Neutral	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Compatible	Compatible	Compatible	Neutral	Neutral	Neutral
A place where infrastructure comes first and meets its inhabitants' needs	Neutral	Neutral	Compatible	Neutral	Neutral	Neutral	Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible	Neutral	Neutral

SA Objective 1: Safety and community cohesion

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.6 A significant proportion of principles and objectives are compatible with this SA objective. This is typically the case where the principle and objectives support the creation of spaces where residents can interact or where a sense of ownership of the Garden Community would be promoted. None of the principles and objectives are considered to be incompatible with this SA objective.

SA Objective 2: Housing

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.7 Several principles and objectives encourage well designed housing that will support the needs of a range of residents and are therefore compatible with this SA objective. A small number of principles and objectives are not compatible with this SA objective as the protection of habitats and landscapes mean that certain parts of the site are not considered suitable for housing development.

SA Objective 3: Health

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.8 A significant proportion of principles and objectives are compatible with this SA objective. In many cases the compatibility reflects the support for the provision of open spaces and other facilities which might support public health. Principles and objectives that support the uptake of active modes of transport are also considered to be compatible with this SA objectives. No principles or objectives are assessed to be incompatible with this SA objective.

SA Objective 4: Vitality and viability of centres

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.9 Several principles and objectives encourage the vitality and viability of centres, for example by supporting links to these areas and allowing for appropriate levels of density which is likely to help support the viability of services at these locations. No principles or objectives are assessed to be incompatible with this SA objective.

SA Objective 5: Economy

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.10 Several principles and objectives encourage a prosperous and sustainable economy and therefore are considered to be compatible with this SA objective. This is notably the case for principles and objectives that directly support the delivery of accessible employment space and centres that respond positively to changing patterns of retail. “A place shaped by nature and landscape” and “a place with thriving ecology and biodiversity” are both assessed as incompatible with this SA objective as the protection and provision of landscape and natural environment may restrict employment development in certain areas.

SA Objective 6: Biodiversity and geological diversity

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.11 In general the principle and objectives are mostly assessed as being compatible or neutral in relation to this SA objective. The principles and objectives include support for green infrastructure as well as the protection of existing biodiversity sites. A small number of principles and objectives are assessed to be incompatible with this SA objective due to the support for the development of homes, employment uses and energy infrastructure that could potentially conflict with the conservation and enhancement of the natural environment.

SA Objective 7: Sustainable travel

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.12 A significant proportion of principles and objectives encourage sustainable travel, including increasing the viability of walking and cycling and are therefore compatible with this SA objective. None of the principles and objectives are considered to be incompatible with this SA objective.

SA Objective 8: Services and infrastructure

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.13 Many of the principles and objectives will encourage accessibility to services and infrastructure, and therefore are compatible with this SA objective. This includes at the new neighbourhood centres to be delivered at the Garden Community and by sustainable modes of transport. Support for access to high speed broadband is also included. None of the principles and objectives are considered to be incompatible with this SA objective.

SA Objective 9: Historic environment and townscape

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.14 Many of the principles and objectives support the retention of features which contribute to the setting of the historic environment and the townscape. There is also support in the principle for objectives for high quality design and architectural style. Where the principle and objectives provide direct support for new development that might adversely affect the setting of heritage assets they are deemed to be incompatible with this SA objective.

SA Objective 10: Energy efficiency and climate change

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.15 A great number of the principles and objectives are assessed as compatible with this SA objective. In general it is expected that the principle and objectives of the DPD would support minimising greenhouse gas emissions and higher energy efficiency standards at new developments. They also support approaches that would make the Garden Community better adapted to climate change through measures such as the incorporation of green infrastructure. None of the principles and objectives are considered to be incompatible with this SA objective.

SA Objective 11: Water resources and quality

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.16 Several principles and objectives encourage the improvement of water quality and address water scarcity, particularly through the conservation and enhancement of water bodies and water recycling. Therefore, while the majority of principles and objectives are assessed as being neutral in relation to this SA objective, a small number are assessed as being compatible. None of the principles and objectives are considered to be incompatible with this SA objective.

SA Objective 12: Flood risk

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.17 Several principles and objectives encourage the reduction of the risk of flooding, particularly through the protection and provision of green space and green and blue infrastructure. These principles and objectives are assessed as being compatible with this SA objective. None of the principles and objectives are considered to be incompatible with this SA objective.

SA Objective 13: Air quality

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.18 Many of the principles and objectives are assessed as being compatible with this SA objective. These principles and objectives are supportive of measures that would encourage travel by active and public transport thereby limiting the potential for air pollution from private car trips. None of the principles and objectives are considered to be incompatible with this SA objective.

SA Objective 14: Landscape

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.19 Many of the principles and objectives are compatible with this SA objective. Some of the principles and objectives include support for the protection of landscape features as well as green infrastructure. Several principles and objectives are assessed as incompatible with this SA objective due to their support for development which could conflict with the conservation and enhancement of landscapes.

SA Objective 15: Soils and mineral resources

Comment on compatibility between the DPD Principles and Objectives and the SA objectives

4.20 Several principles and objectives encourage the safeguarding and enhancement of the quality of soil and the efficient use of land resources. These principles and objectives are assessed as compatible with this SA objective. This includes the minimisation of hard surfaces and the incorporation of appropriate densities of development. None of the principles and objectives are considered to be incompatible with this SA objective.

4.21 A number of the principles and objectives seek to promote the more efficient use of land resources. However, it is worth noting that safeguarding of mineral resources (e.g. by extraction of viable reserves before development occurs) is not included. The principles and objectives for development at the Garden Community might be strengthened by addressing this topic.

Sustainability effects of the spatial options for the Garden Community

4.22 This section sets out the SA findings for the spatial options considered for the delivery of development at the Garden Community. Three main options were worked up by Prior and Partners on behalf of the Councils and are presented in the Masterplan Design Options Report [See reference 23]. The appraisal of these three options in this report reflects the level of detail that is presented in the Masterplan Design Options Report.

4.23 The options considered were:

- Option 1: 'Maximum development area' – seeks to maximise the use of land for development across the area of search, prioritising full site connectivity with the rapid transit network and four mixed use hubs with differing roles and characters that respond to their setting. This option includes one district centre in the centre of the Garden Community, with smaller 'local' hubs with more community focus for the other neighbourhoods and the potential for southern neighbourhood hub south of the A133 relating to employment and university focus. A range of economic clusters are to be incorporated in the north east and south of Garden Community. Additional employment centres to be clustered in the neighbourhood hubs.

Figure 4.1: Masterplan Diagram for Option 1: Maximum Development Area



- Option 2: 'Maximum connectivity' – seeks to create a new community within substantial landscaped buffers to the east of the link road and the A133, prioritising full site connectivity with the rapid transit network and four mixed use hubs with differing roles and characters that respond to their setting. This option includes one district centre in the south of the Garden Community to recognise the links with Colchester and the University and opportunities for higher densities, with smaller 'local' hubs with more community focus for the northern neighbourhoods and the potential for southern neighbourhood hub south of the A133 relating to employment and university focus. A range of economic clusters are to be incorporated in the north east and south of Garden Community. Additional employment centres to be clustered in the neighbourhood hubs.

Figure 4.2: Masterplan Diagram for Option 2: Maximum Connectivity



- Option 3, Approach A: 'Maximum landscape' – seeks to ensure the retention of landscape setting to the east and south of the new community which is to be distinct from existing settlements. The rapid transit network will follow as direct a route as possible, which slightly reduces its coverage but aims to improve journey times. This option includes three hubs across the Garden Community with the aim of creation truly walkable neighbourhoods. The maximised landscape setting may result in higher densities. An area of employment is to be provided in a cluster to the north east of the site related to the road network and park and chose provision. Additional employment centres to be clustered in the neighbourhood hubs and employment will be spread across the site.

Figure 4.3: Masterplan Diagram for Option 3, Approach A: Maximum Landscape



4.24 The Masterplan Design Options Report also identified one additional sub-option for the spatial distribution of development at the Garden Community. This option represents a variation of option 3 above. The option is detailed in the Council’s Spatial Options Report and is summarised below:

- Option 3, Approach B: ‘Alternative approach to maximum landscape’ – provides development at the new Garden Community in broadly the same distribution as option 3. However, through option 3a land is provided to the south of the A133 and East of the main existing campus for university expansion. This land could accommodate academic and other university related uses. It could also allow for expansion of sports pitches and recreation in close proximity to existing related facilities on campus. This alternative would still result in the majority of the land south of the A133 and within the area of search being retained as a green buffer to neighbouring settlements. Knowledge based employment uses would be provided north of the A133. Under this option these could potentially be extended westwards to provide a more direct relationship and link to the Knowledge Gateway. The approach could also deliver a mix of uses to the north of the A133, with the land becoming part of the Garden Community neighbourhoods, with potential for residential with other associated uses.

4.25 Table 4.3 below presents the expected sustainability effects for the four spatial options. The likely sustainability effects are described by SA objective below the table.

Table 4.3: Sustainability effects for options considered in relation to the distribution of development at the Garden Community

SA Objective	Option 1: Maximum development area	Option 2: Maximum connectivity	Option 3, Approach A: Maximum landscape	Option 3, Approach B: Alternative approach to maximum landscape
SA 1: Safety and community cohesion	+/-	+/-	++	++/-
SA 2: Housing	++	++	++	++
SA 3: Health	+/-	+/-	++/-	+/-
SA 4: Vitality and viability of centres	+/-	+/-	++	++/-
SA 5: Economy	++	++	++	++
SA 6: Biodiversity and geological diversity	--/+	+/-	++/-	+/-
SA 7: Sustainable travel	+/-?	+/-?	++/-	++/-
SA 8: Services and infrastructure	+/-	+/-	++	++/-

SA Objective	Option 1: Maximum development area	Option 2: Maximum connectivity	Option 3, Approach A: Maximum landscape	Option 3, Approach B: Alternative approach to maximum landscape
SA 9: Historic environment and townscape	--?	--?	-?	-?
SA 10: Energy efficiency and climate change	+	++	++	++
SA 11: Water resources and quality	+	+	+	+
SA 12: Flood risk	+/-	++/-	++/-	++/-
SA 13: Air quality	+/-	+/-	++/-	++/-
SA 14: Landscape	--/+	+/-	++/-	+/-
SA 15: Soils and minerals resources	--	--	--	--

SA Objective 1: To create safe environments which improve quality of life, community cohesion

4.26 It is likely that the potential to limit crime, fear of crime and the occurrence of antisocial behaviour will be most influenced by the detailed design of development (for example the incorporation of appropriate lighting schemes and the incorporation of footpaths and open spaces to be overlooked for active

frontages). These issues will not be influenced by the selection of one of the four options for the distribution of development at the Garden Community.

4.27 All four options will include the delivery of new community infrastructure (such as healthcare, schools and early learning centres). All options also require the incorporation of new community hubs (centres) for a focus of these new provisions as well as open spaces where residents might be able to meet their day to day needs. These locations are also likely to support informal social interactions between residents, thereby promoting a degree of social cohesion and promoting tolerance. All four options are likely to support a degree of self-containment at the new community, given the community services to be delivered, which will support the creation of a sense of identity at the site. The connectivity provided through all options via the network of active travel routes and rapid transit network will support linkages to existing neighbourhoods within Colchester.

4.28 The focus on delivering a 'maximum development area' through option 1, means that this option will incorporate the lowest amount of open space. Options 1 and 2 would each include four centres as to help ensure that all residents are provided with good access to the new services and facilities within reasonable walking distance. Through options 1 and 2, the centre provided to the centre and south of the Garden Community respectively, is to be a larger district centre with a wider range of provisions, as supported by three smaller local centres at other locations within the Garden Community site. Both of these options include development to the south of the A133 which would incorporate a local centre with a limited range of community facilities. Residents at these locations, through options 1 and 2, could lack immediate access to certain provisions. While there could be potential for improved connections with the University of Essex Colchester Campus, through these options, the presence of the A133 is likely to result in severance from the other parts of the Garden Community for many residents in the parcel of land to the south of this route.

4.29 In contrast, option 3, approach A would result in the most compact form of development with land to the south of the A133 preserved as landscape buffer. While only three centres are to be incorporated through this option, residents

would benefit from good levels of walkability to these locations from most parts of the site. Furthermore, the range of services and facilities at each centre is likely to be increased through this option, given the increased development density at each location. Given that this option would incorporate the largest extent of open space, it may also support increased interactions between residents. Option 3, Approach B would result in an alteration of option 3 to include land for university expansion to the south of the A133. The extent of open space would be only slightly reduced through this alteration of option 3. Through option 3, approach B, the development to the north of the A133 would be extended further to the west. A degree of severance is likely to result between the development to the south of the A133 and that to the north of this road through option 3, approach B. However, it is noted that this development would integrate with the university given its proposed use. The increased westward extension of development within the site to the north of the A133, through this option is likely to result in some site users having more limited access to services and facilities within the new centre to be delivered in the southern part of the Garden Community. The needs of these site users to access services and facilities within the centre will be influenced by the specific nature of the uses permitted within these parts of the site.

4.30 Overall, a mixed minor positive and minor negative effect is expected for options 1 and 2. A significant positive effect is expected for options 3, approach A and 3, approach B. For option 3, approach B a minor negative effect is expected in combination.

SA Objective 2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

4.31 All four options would support the delivery of 8,000 homes which will contribute to meeting the housing need across Colchester and Tendring. The

level of affordable housing and mix of dwelling tenures and sizes is not expected to be affected by the spatial distribution of development at the Garden Community. Through option 1 the density of development (average of 40 dwellings per hectare – ‘dph’) would be lower than option 2 (average of 45 dph), option 3, approach B (average of 46.5 dph) and option 3, approach A (average of 50 dph), however, all three options would include housing at densities varying across the site from 30 to 75 dph, providing new residents with a range of property types to choose from. While the lower density of development supported through option 1 could potentially allow for the incorporation of larger private gardens and larger living spaces at the new homes delivered, this may also be achieved through options 2, 3, approach A and 3, approach B through creative design.

4.32 Overall, a significant positive effect is expected for all four options.

SA Objective 3: To improve health/reduce health inequalities

4.33 As described in relation to SA objective 1, all three options would incorporate a similar level of community services and facilities. All three options would also support travel by more active modes and thereby healthier lifestyle choices, through the incorporation of a network of suitable routes at which priority can be given to walking and cycling.

4.34 The higher density of development and smaller developed area of option 3, however, is likely to result in a higher number of homes being provided in close proximity to health and social care facilities within the three centres to be provided. Given the shorter distances of many trips, residents will be required to take on a regular basis, option 3, approach A will also support a larger number of trips being taken by foot and cycle, to the benefit of health and wellbeing. The alteration of option 3, approach A set out through option 3, approach B, would result in the inclusion of land for the university expansion to the south of the A133. A degree of severance is likely to result between the development to the

south of the A133 and that to the north of this road through option 3, approach B. However, this development is likely to integrate effectively with the university given its proposed use. To the north of the A133 development would extend further to the west. Site users at this more westerly location would be less well related to the new centre to be incorporated at the south of the Garden Community and it is likely that trips by active mode would be less likely from these areas.

4.35 Options 1 and 2 are likely to result a markedly higher proportion of journeys being made by car. This is likely particularly given the potential for the severance of residents within the parcel of land to the south of the A133 from services and facilities they need to access regularly, notwithstanding the fact that the rapid transit system and green links and connections would cross the A133 under all three options. Furthermore, through options 1 and 2, the distribution of services and facilities across four centres (instead of three centres), may mean that some residents will have access to a more limited scale of provision for healthcare nearby.

4.36 The higher average density of development set out through option 3, approach A also supports the incorporation of a larger amount of open space at 55% of the total site area. This will increase access to opportunities for outdoor recreation among new residents and also allow for appropriate interactions with nature, which has been shown to support improved wellbeing. Options 2 and 3, approach B would incorporate a comparable level of open space at 52%. While all four options would incorporate new open space and sport uses throughout the site, through option 3, approach B, the variation of option 3, approach A to include land south of A133 for development, would also provide new sports/recreation uses, which are likely to benefit residents of the new Garden Community as well as users of the university. In contrast, option 1, which seeks to maximum the developable area within the Garden Community, would incorporate the lowest level of open space at 48% of the total site area.

4.37 There is potential for noise, light and air pollution from the A120 to the north and A133 to the south to affect new residents at the site. However, all four options incorporate landscape buffer areas towards these routes which is likely

to help mitigate these effects. Furthermore, all four options incorporate speed reduction on the section of the A133 that is adjacent to the Garden Community site.

4.38 Overall, a mixed minor positive and minor negative effect is expected for options 1, 2 and 3, approach B and a mixed significant positive and minor negative effect is expected for option 3, approach A.

SA Objective 4: To ensure and improve the vitality and viability of centres

4.39 While Garden Community benefits from being relatively well related to edge of the town of Colchester, the town centre is 3.1km away and the Garden Community is envisaged as a new freestanding community in its own right. Therefore, the effects described relate mostly to the vitality and viability of new centres to be incorporated at the site. As described in relation to SA objective 1, all three options would incorporate a similar level of community services and facilities. It is also likely that the vitality and viability of the centres to be incorporated as part of the new Garden Community through each option would be equally supported by the connectivity provided by the rapid transit system and new green links. Compared to options 3, approach A and 3 approach B, there is some potential for full coverage provided by the rapid transit system through options 1 and 2 to result in slower journeys times (with negative implications for access to the new centres within the Garden Community) given the larger area of the site to be covered. However, this is considered further in relation to SA objective 7: sustainable travel.

4.40 Given the larger number of centres incorporated through options 1 and 2, the lower development density at each of these locations is likely to mean that a more limited range of services and facilities will be supported. Furthermore, the lower average density of development (40 dph and 45 dph, respectively) and the larger overall site area covered by the Garden Community is likely to mean that some residents will not be located within walking distance of a centre which

provides access to the range of services and facilities they need regular access to. As such, it is likely that options 1 and 2 would be less supportive of centres that residents access regularly, with negative effects on their long term viability. The delivery of development in the southern parcel of land beyond the A133, through options 1 and 2 is likely to support increased connectivity with the existing university campus. However, although there will be rapid transit system and green link connections across this route, it is likely that the severance resulting from the road may limit the potential for new residents at this location making use of other centres within the Garden Community.

4.41 The potential for a degree of severance to result is also likely through option 3, approach B. However, the uses to be provided to the south of the A133 through this option will allow for the expansion of the university. This area of development is therefore expected to integrate effectively with existing development to the south of the road. The location of additional residential and associated uses in the west of the Garden Community through option 3a is likely to mean more residents will have more limited access to the centres to be provided, particularly when compared to option 3, approach A. While option 3, approach B (46.5 dph) would also result in a higher average development density than options 1 and 2, the development density achieved at the Garden Community would be lower than that set out through option 3, approach A (50 dph).

4.42 Overall, a mixed minor positive and minor negative effect is expected for options 1 and 2. A significant positive effect is expected for options 3, approach A and 3, approach B. For option 3, approach B a minor negative effect is expected in combination.

SA Objective 5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

4.43 As described in relation to SA objective 1, all four options would incorporate a similar level of community services and facilities (including schools). This is likely to mean that residents would mostly have good levels of access to facilities supporting learning in the Garden Community. Furthermore, all four options would provide for new homes that would be relatively well related to the Colchester Knowledge Gateway which is located along the A133.

4.44 All four options would also support connectivity across the site, given the green links and rapid transit system to be incorporated. This includes to the existing university campus to the south of the A133 via the rapid transit system. As such, new residents would benefit from a good level of access to facilities at this location which could support opportunities for long term learning. Through options 1, 2 and 3, approach B the development to the south of the A133 would form an extension of the existing campus, thereby potentially supporting increased links between the Garden Community and the existing campus site. This is most notable through option 3a given that the land included for development to the south of the A133 is to allow for the expansion of the university through this option. While option 3, approach A does not include land to the south of the A133, land for the expansion of the university is also incorporated through this option. This option would support the expansion of the university to the north of the A133.

4.45 All four options would also allow for the incorporation of employment opportunities at neighbourhood hubs across the Garden Community. All four options include substantial employment clusters to the north east and south of the site. Through options 3, approach A and 3, approach B the employment

cluster in the south of the site is specified to be located at land to the north of the A133. The location to the north of the A133, under options 3, approach A and 3, approach B, would incorporate knowledge-based employment uses as well as allowing for the expansion of the university. Option 3, Approach B has the greatest potential to expand on uses already in place and emerging on the Knowledge Gateway. This option would result in employment uses occurring further to the west and in close proximity to the Knowledge Gateway area, in the land to the north of the A133. This option is considered most likely to support improved economic benefit given the potential for increased synergy with existing and proposed uses at the Knowledge Gateway. The approach set out through all four options would make good use of the existing road network and support uses which require HGVs or similar, as well as supporting connectivity for a large number of residents to employment opportunities, many via the rapid transit system.

4.46 Overall, a significant positive effect is expected for options 1, 2, 3, approach A and 3, approach B.

SA Objective 6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

4.47 The development of the site through all three options would result in a large amount of greenfield land take. While the policy position for the Garden Community is to achieve a minimum 10% biodiversity net gain, new or enhanced habitats can take some time to become established and their biodiversity benefits are inherently more uncertain than those of existing habitats. It is likely that the development and supporting infrastructure required would result in loss, disturbance and fragmentation of existing habitats through construction activities and once new homes and businesses are occupied. To the west of the site there are a number of areas of ancient woodland, as well as Salary Brook Local Nature Reserve and several Local Wildlife Sites. Through all four options, these areas would be retained as undeveloped land, although

there is potential for impacts relating to increased recreation from new residents and air pollution associated with increasing numbers of car journeys in the area. A large country park would also be delivered through all four options.

4.48 Option 1 seeks to achieve the maximum developable area within the site boundary. As such, although the development would be delivered in the context of a landscape framework, with substantial buffer zones to the southern and eastern edges, the development footprint as well as the infrastructure required to support growth at the site (including a more extensive rapid transit system) would result in a large amount of greenfield land take. Through option 2 the increased density of development would mean that the rapid transit system would be less extensive and most importantly the landscape buffers retained to the south and east would be more sizeable. Option 3, Approach A incorporates an approach to maximise the area to be retained as undeveloped. The higher densities of development supported through this option will mean that the land to the south of the A133 can provide more extensive landscape buffers while the same overall level of housing development is achieved. Option 3, Approach B represents an alternation of option 3, approach A, with a sizeable area of the site to remain as undeveloped, however, the average development density through this option is lower than option 3 approach A. Through this option development would be required to extend further to the west than any other options considered. As with all other options considered, Salary Brook Local Nature Reserve would not be developed, the further westward expansion required through this option would reduce the separation between this biodiversity site and the Garden Community, with increased potential for habitat fragmentation and disturbance. Furthermore, development would occur within part of the land to the south of the A133, however, a portion of this land larger than through options 1 and 2 would be maintained as a landscape buffer.

4.49 Overall, a mixed minor positive and significant negative effect is expected for option 1, a mixed minor positive and minor negative effect is expected for options 2 and 3, approach B and a mixed significant positive and minor negative effect is expected for option 3, approach A.

SA Objective 7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

4.50 Given the level of development at the Garden Community, an increased number of journeys in the area is expected as homes are occupied, and businesses become operational. A proportion of these will be made by private car, with the overall level dependent on the choices of new residents and users of the site. This increase in car travel in the area will contribute to local congestion contributing a minor negative effect in relation to the mixed effects recognised for SA objective 7.

4.51 As described in relation to SA objectives 1 and 5, all four options would incorporate a similar level of community services and facilities and employment opportunities at neighbourhood hubs across the Garden Community. The incorporation of these provisions at the site is likely to help support a level of self-containment and reduce the need for regular travel to be made by car from the Garden Community. All four options are expected to provide good access to employment opportunities given the employment clusters to be incorporated at the north east and south of the site and jobs provided within the new centres to be incorporated. Furthermore, all options will support connectivity across the site given the green links and rapid transit system to be incorporated.

4.52 Through all four options there is potential for new residents to make use of existing bus stops and new bus services that will supplement the rapid transit system along the A133. This potential is greatest under options 1, 2 and 3, approach B with the increased level of development to the south of the A133, close to the university campus and the service and facilities in this area. It is noted that all three options allow for increased connections across the A133 towards the university campus, which may mean that any difference between the four options in relation to use of existing bus stops at the university campus may be minimal.

4.53 By providing a higher density of development and smaller developed area, option 3, approach A is expected to perform most favourably in terms of promoting trips by active and sustainable modes. This option is also considered have the greatest potential for achieving a rapid transit system which achieves a level of coverage and the requisite speed of journey times to remain viable in the longer term. This would be achieved by locating stops at the park and choose site, the district centres (where density of development is highest and the greatest number of people can access services) and the university. Option 3, approach B would result in a slightly lower density of development than option 3, approach A (46.5 dph compared to 50 dph) which could reduce the potential for trips to be made by active modes. The rapid transit system would achieve a similar level of coverage to option 3, approach A, with the relatively small area of development included to the south of the A133 meaning that users of this part of the site would be in relatively close proximity to new services along the A133. However, the further westerly extension of the site through option 3, approach B would mean some site users and residents would be less well related to the new centres to be incorporated at the Garden Community which could reduce the potential for travel by more sustainable and active modes.

4.54 The area required to be served by the rapid transit system included through option 2 and option 1 in particular is greater, given the larger size of developed area involved. This means that journey times for passengers towards Colchester and other settlements would be longer, thereby adding uncertainty in relation to achieving the level of use needed to support its longer viability under options 1 and 2.

4.55 Overall, an uncertain mixed minor positive and minor negative effect is expected for options 1 and 2, a mixed significant positive and minor negative effect is expected for option 3, approach A and a mixed minor positive and minor negative effect is expected for option 3, approach B.

SA Objective 8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

4.56 As described in relation to SA objectives 1 and 7, all four options would incorporate a similar level of community services and facilities as well as green links and routes for a rapid transit system. It is likely that through all four options residents would benefit from some level of access to services and facilities including by public transport. The Garden Community is also to be supported by the incorporation of infrastructure for superfast broadband and it is unlikely that any of the three options considered will influence the potential for its delivery.

4.57 Options 1 and 2 would incorporate development across a larger site area. Given the wider distribution of development, some residents within the site are likely to lack local access to a wide range of services and facilities. The southern parcel of land beyond the A133 would be developed through these options which would require increased connectivity with the existing university campus. However, although there will be rapid transit system and green link connections across the A133, it is likely that the severance resulting from the road may limit the potential for new residents at this location to make use of other centres within the Garden Community. While a new centre is to be provided in this location through these options, the higher number of centres incorporated through both options 1 and 2 is likely to result in a smaller number of residents being within easy walking or cycling distance of each centre, thereby reducing the likely level of service provision that can viably be supported.

4.58 Option 3, Approach A would locate a higher number of residents in close proximity to larger centres where there is access to a greater number of services. The higher densities of development achieved through this option

would support increased levels of access to services and facilities for a large number of residents. Option 3, Approach B would result in a slightly lower level of average density of development meaning the potential for achieving a high level of access to services and facilities for a large number of residents would be less pronounced. The further westerly extension of the developed area though this option may result in some site users having reduced access to a wide range of services and facilities. It is noted, however, that the requirements of site users to access these provisions from this location will be dependent largely on the specific activities permitted at this part of the site. Furthermore, this option includes some development to the south of the A133 to allow for the expansion of the university. As explained in relation to options 1 and 2, there is some potential for a degree of severance to result between this area and the areas of the Garden Community to the north of the A133. Given that option 3, approach A specifically incorporates land to the south of the A133 to allow for the expansion of the university, it is expected that this area would integrate well with the existing university area. All options are expected to provide residents with good access to jobs given the provision of employment land within the new centres at the Garden Community and through the incorporation of employment clusters to the north east and south of the site.

4.59 Overall, a mixed minor positive and minor negative effect is expected for options 1 and 2 a significant positive effect is expected for option 3, approach A and a mixed significant positive and minor negative effect is expected for option 3, approach B.

SA Objective 9: To conserve and enhance historic and cultural heritage and assets and townscape character

4.60 The Garden Community area contains and is in close proximity to a number of heritage assets as well as existing historic lanes which contribute to the existing character of the area. This includes a number of listed buildings towards Crockleford Heath, Grade II Listed Allen's Farmhouse to the north east

of the site, and Wivenhoe Registered Park outside of the site boundary to the south west. Undoubtedly the delivery of a relatively high level of development within the site will affect the setting of these assets. Effects are likely to result regardless of the mitigation strategy implemented. There is, however, potential for the magnitude of effects to be reduced through an appropriate approach, although the specific effect is uncertain at this stage given that this will depend on the detailed design of the site which is currently unknown. The general approach to the masterplanning of the site is to respond to the important features within and surrounding the site by incorporating buffers to heritage assets including towards those at Crockleford Heath and Wivenhoe Registered Park (to the north of the A133) and repurposing existing historic lanes as part of the network of green links within the site.

4.61 All four options include landscape buffers around Crockleford Heath and towards Wivenhoe Registered Park, to the north of the A133. However, maximising the area of development through option 1, in particular, would result in an increased level of development within the parcel of land to the south of the A133 which has potential to impact upon the setting of Wivenhoe Registered Park. Options 2, 3, Approach B and 3, Approach A, in particular, include a more substantial area of landscape buffer in the southern parcel of land. Through options 1 and 2 the area of the landscape buffer towards Grade II Listed Allen's Farmhouse would be substantially reduced compared to options 3, approach A and 3, approach B meaning these options could result in increased adverse effects in relation to the setting of this heritage asset.

4.62 Overall, an uncertain significant negative effect is expected for options 1 and 2 and an uncertain minor negative effect is expected for options 3, approach A and 3, approach B.

SA Objective 10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

4.63 It is expected that impacts relating to energy use and practices relating to waste management will be affected by the behaviour of new residents at the site, although the design of new homes can influence these behaviours. The potential for waste reduction and promoting recycling at the site will also be influenced by the potential for residents to benefit from kerbside collections and it is expected that this service would be extended to serve the Garden Community area. All three options considered are to incorporate higher building standards to increase energy efficiency and on-site renewable energy facilities for generation and storage, thereby limiting the community's dependency upon energy from fossil fuels.

4.64 The potential for developments to be delivered to be adaptable to climatic change will be influenced by detailed design, such as the incorporation of appropriate materials and building orientation. It will also be of importance to incorporate green infrastructure at the site which will help attenuate flood waters, support the sequestration of greenhouse gases, adapt the Garden Community to higher temperatures resulting from climate change and support habitat connectivity as species come under pressure from changing weather patterns. All four options would maintain the green edge to Colchester with the creation of a major new country park and enhance the existing north-south green infrastructure as well as providing east-west green infrastructure linkages. While each option incorporates a minimum 48% of open space, the provision of open space under options 2 (52%), 3, approach A (55%) and 3, approach B (52%) is notably higher than under option 1 (48%). These three options are therefore expected to deliver development that would be better adapted to the effects of climate change than option 1.

4.65 Overall, a minor positive effect is expected for option 1 and a significant positive effect is expected for options 2, 3, approach A and 3, approach B.

SA Objective 11: To improve water quality and address water scarcity and sewerage capacity

4.66 Achieving more efficient water use and the potential to limit water scarcity through these means, will be most influenced by the behaviour of new residents at the Garden Community. The detailed design of the site and other measures such as the incorporation of low-flow water appliances may also help address this issue. All four options would be delivered to incorporate Sustainable Drainage Systems and water management systems to mimic natural hydrological processes. Each option would support the restoration of Borrow Pits to the east of Link Road as water bodies. The Garden Community lies outside of Source Protection Zones (SPZ) in Tendring and Colchester and it is not expected that the variation of the distribution of development through each option would greatly impact water quality.

4.67 The Integrated Water Management Strategy (IWMS) Stage 2 report has been commissioned to inform future work as part of the DPD process. This report will be able to inform further stages of masterplanning for the site and the SA for the submission plan. The IWMS Stage 1 report [See reference 24] was carried out for the Section 1 Local Plan and concluded for the three Garden Communities in North Essex considered as part of that plan, that there are workable wastewater options within the limits of conventional treatment which would not impact on the Water Framework Directive status of receiving waterbodies.

4.68 A minor positive effect is expected for all four options.

SA Objective 12: To reduce the risk of fluvial, coastal and surface water flooding

4.69 Within the site there are areas of higher flood risk (including areas of flood zone 3) along Salary Brook to the west. There are also small areas of 1 in 30

years surface water flood risk and medium ground water flood risk interspersed throughout the site. Under all four options, these areas would be maintained as undeveloped within a landscape buffer. All four options are also to incorporate sustainable drainage systems and water management systems which mimic natural hydrological processes. Nonetheless, the development of a relatively large area of greenfield land would increase the amount of impermeable surfaces, which could increase downstream flood risk. Given the larger area of development set out through option 1 and the reduced level of open space incorporated through this option, it is not expected to perform as well as options 2, 3, approach A and 3, approach B in relation to minimising flood risk.

4.70 Overall, a mixed minor positive and minor negative effect is expected for option 1 and a mixed significant positive and minor negative effect is expected for options 2, 3, approach A and 3, approach B.

SA Objective 13: To improve air quality

4.71 Given the amount of development at the Garden Community, an increased number of journeys in the area is expected as homes are occupied, and businesses become operational. A proportion of these will be made by private car, with the overall level dependent on the choices of new residents and users of the site. This increase in car travel in the area will contribute to adverse air quality, although it is noted that technological advancement have seen a general trend towards less polluting vehicles. As described in relation to SA objectives 1 and 5, all three options would incorporate a similar level of community services and facilities and employment opportunities at neighbourhood hubs across the Garden Community. The incorporation of these provisions at the site is likely to help support a level of self-containment and reduce the need for regular travel to be made by car from the Garden Community. Reduced travel within and from the site is expected to help limit air pollution associated with travel at the site. There are existing air quality issues within the town of Colchester, with an AQMA having been declared within the town centre; however, it is not expected that any one option would have substantially increased potential to affect air quality at this location.

4.72 All four options support connectivity across the site, given the green links and rapid transit system to be incorporated. It is also expected that all options would provide nearby access to employment opportunities within the new centres to be incorporated as well as at the new employment clusters to be focussed towards the north east and south of the Garden Community site.

4.73 Through all four options there is potential for new residents to make use of existing bus stops and new bus services that will supplement the rapid transit system along the A133. This potential is greatest under options 1, 2 and 3, approach B with their increased level of development to the south of the A133, close to the university campus and the services and facilities in this area. It is noted that all four options allow for increased connections across the A133 towards the university campus, which may mean that any difference between the four options in relation to use of existing bus stops at the university campus may be minimal.

4.74 By allowing a higher density of development and smaller overall developable site area, option 3, approach A and to a lesser extent option 3, approach B are expected to perform most favourably in terms of promoting trips by active and sustainable modes and thereby having more limited impacts on air quality. These options are also considered to have the greatest potential for achieving a rapid transit system which achieves a level of coverage and the requisite speed of journey times to remain viable in the longer term. This would be achieved by locating stops at the park and choose site, the district centres (where density is highest of development and the greatest number of people can access services) and the university. Option 3, Approach B is likely to achieve many of the benefits identified for option 3, approach A. However, the extension of the developed area further to the west towards the Knowledge Gateway area through this option, is likely to mean that some site users and residents would be less likely to benefit from easy access to a wide range of services and facilities within the new centres to be incorporated. The area served by the rapid transit system included through option 2 and option 1 in particular is greater, given the larger size of developed area involved. This means that journey times for passengers towards Colchester and other settlements would be longer, which could affect the potential for residents to regularly use its services and support its longer viability.

4.75 All four options incorporate similar areas of landscaping surrounding the main routes (most notably the A120 and A133) at the edge of the Garden Community which will help to minimise impacts from air pollution associated with these routes. Each option also incorporates targeted speed reductions and traffic calming on the A133 immediately to the south of the Garden Community and these measures will further help to reduce the potential for air pollution from this source to affect residents at the site.

4.76 Overall, a mixed minor positive and minor negative effect is expected for options 1 and 2 and a mixed significant positive and minor negative effect is expected for options 3, approach A and 3, approach B.

SA Objective 14: To conserve and enhance the quality of landscapes

4.77 Much of the Garden Community area is assessed as having high to moderate landscape value and the plateau edges have been identified to form visible skylines which are particularly sensitive to built development. Recommendations for the development of the site include the retention of woodlands and hedgerows/field boundaries [See reference 25]. Furthermore, the site takes in land between the settlements of Colchester, Wivenhoe and Elmstead Market. As such, without sensitive design, there is potential for the loss of or impacts relating to existing features of landscape value, harm to existing character and the coalescence of settlements.

4.78 Through all four options a country park would be incorporated to the west thereby helping to maintain separation between the Garden Community and the settlement of Colchester. The maintenance of this area as undeveloped will also help to maintain areas of ancient woodland and support the incorporation of green infrastructure which is likely to benefit landscape character in the area. Option 1 seeks to achieve the maximum developable area within the site boundary. Through this option, while development would be delivered in the context of a landscape framework, with 50m buffer zones to the southern and

eastern edges, there would be a more extensive development footprint and the infrastructure required to support growth at the site would be more extensive including an extended rapid transit system.

4.79 Of the four options considered, option 1 would include the highest level of development to the south of the A133 which could result in a limited sense of separation between the Garden Community and the settlement of Wivenhoe to the south. In all, it is expected that the lower levels of density delivered through this option would result in increased sprawl and encroachment on presently undeveloped area including those with existing landscape value. Through option 2 the increased density of development would mean that the rapid transit system would be less extensive and most importantly the landscape buffers retained to the south and east would be more sizeable.

4.80 While all options incorporate a range of densities to respond to the exiting character of the site, option 3, approach A incorporates an approach to achieve higher levels of density and maximise the area to be retained as undeveloped, with extensive landscape buffers to the south and east. While higher densities of development achieved could have implications for local character, incorporating a range of densities to respond appropriately to local character will mitigate the potential for adverse effects. The higher densities of development supported through this option will mean that the land to the south of the A133 can be retained entirely as undeveloped while the same overall level of housing development is achieved. Furthermore, the area of landscaping towards the eastern boundary of the site is most extensive through this option. This approach is considered to be of particular importance in terms of preventing coalescence between the settlements of Colchester, Wivenhoe and Elmstead Market as the Garden Community is developed.

4.81 Through option 3, approach B, a relatively high average development density would result which is only lower than that set out through option 3, approach A. Option 3, Approach B, however, would result in an alteration to option 3, approach A which would include land for development to allow for the expansion of the university to the south of the A133 and for the further westerly extension of development to the north of this road. This approach has the

potential to contribute to coalescence between the Garden Community and Wivenhoe to the south. It would also result in some development on the eastern slopes of the Salary Brook valley with potential effects relating to the landscape and topographical context of this area. These issues would need to be addressed by maintaining the openness of the southern area of parcel of land to the south of the A133 through the incorporation of appropriate uses such as sport and recreation and by sympathetic design in the area to north and west of the A133.

4.82 Overall, a mixed minor positive and significant negative effect is expected for option 1, a mixed minor positive and minor negative effect is expected for options 2 and 3, approach B and a mixed significant positive and minor negative effect is expected for option 3, approach A.

SA Objective 15: To safeguard and enhance the quality of soil and mineral deposits

4.83 The majority of the Garden Community area falls within a mineral safeguarding area for sand and gravel. The site is greenfield land and much of it comprises grade 1 agricultural soils, with some areas of grade 2 and grade 3 soils to the north west and west, respectively. The development of the Garden Community will therefore result in the loss of a large area of greenfield land as well as loss of access to higher value agricultural soils. It may be that the extraction of any viable mineral resources can be achieved before development of the site occurs.

4.84 The more extensive footprint of development that would result through option 1 would result in loss of a larger area of greenfield and higher value agricultural soils. The land within the site, proposed to be free from built development, would be maintained as open space and green infrastructure which may limit these areas use for agricultural purposes. However, there is potential for the incorporation of allotments and orchards at the site in these locations, which would benefit from being located on higher value soils.

Furthermore, the maintenance of these areas as undeveloped may allow for their use for more intensive food growing in the longer term. Option 3, Approach A and to a lesser extent option 3, approach B would preserve a more substantial area of the Garden Community site as undeveloped. However, even under these options, the amount of greenfield land take and area of higher value agricultural soils to be developed would still be relatively high.

4.85 Overall, a significant negative effect is expected for all four options.

Conclusions for SA of masterplan options

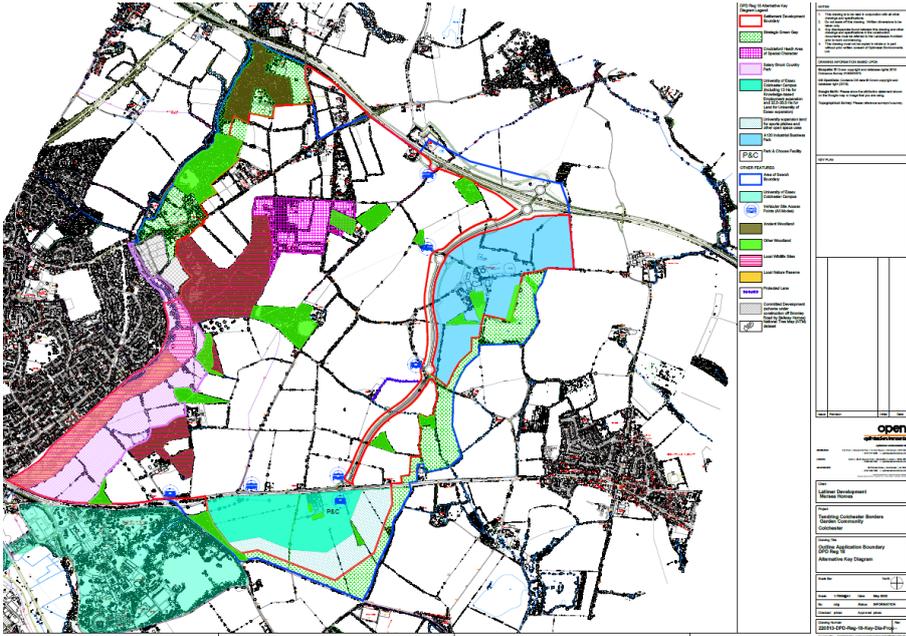
4.86 Of the four options considered for the spatial layout of the Garden Community, the preferred option (option 3, approach A) on which Policy 1 is based was found to perform more sustainably than the reasonable alternatives. This reflects the higher proportion of the site that would remain undeveloped, with increased benefits in terms of preserving local landscape character, the setting of nearby settlements and heritage assets and greenspace for habitat provision and connectivity. This approach was also found to perform more favourably in terms of limiting the need to travel by car, given the higher density and more compact form of development that would result. This approach is considered mostly likely to provide residents with easy access to a range of services and facilities within the Garden Community at the new centres. Option 3, Approach A would also limit the potential for a portion of residents to be located to the south of the A133 (as would result through options 1 and 2) where they would experience a degree of severance from the rest of the Garden Community. While option 3, approach B would also provide some new development to the south of the A133, this land would allow for the expansion of the university. Therefore, the issue of severance resulting from the A133 is less of an issue under this option, given the level of integration that would be achieved with the existing university area and services and facilities at this location.

Potential refinements to the four masterplan options

4.87 Three potential refinements to the masterplan options were identified during the Regulation 18 consultation process, as outlined below:

- Refinement A: 'Latimer/Lichfields' – focuses development south of the A133 to accommodate the expansion of the University of Essex. This option would allocate between 32.5 and 35.5 hectares to accommodate: student accommodation and support facilities, new sports facilities, and new sports pitches. Additionally, this option includes land for the knowledge-based employment also to be located south of the A133. This could potentially provide a more direct relationship between the Knowledge Gateway and the University of Essex and create an opportunity for the Rapid Transit System to better connect with the University campus.

Figure 4.4: Masterplan Diagram for Refinement A: Latimer/Lichfields



- Refinement B: 'University of Essex' – this option would include: 12 to 15 hectares of student accommodation and support facilities, 3.5 hectares of new sports buildings/facilities, up to 17 hectares of new sports pitches and additional knowledge-based employment land. This option would allocate 13ha of knowledge-based employment land north of the A133. It is assumed that the 13ha would be allocated on the 15ha of land, which was shown in Option 3, Approach A of the Draft DPD as 'university expansion land' and 'knowledge-based employment'. The additional land proposed for student accommodation and sports pitches would take place on land south of the A133.
- Refinement C: 'Greenstead Councillors and Community' – focuses development directly north of the A133 and south of the A133 to accommodate the expansion of the University of Essex and Knowledge Gateway area. Additionally, this option includes land for the knowledge-based employment also to be located south of the A133. There is also proposed access into the new knowledge gateway area and university sports area.

4.88 These options only suggest changes to portions of the Garden Community development regarding land allocated for the University of Essex and the knowledge-based employment site. As such, any of them could be 'added' to any of the four masterplan options appraised above. Therefore, they have not been appraised as standalone options but rather a brief commentary is provided below on the likely sustainability effects of these potential refinements to the four masterplan options.

4.89 All three refinements would increase the amount of employment land, positive effects would be expected for SA 5: Economy and SA 8: Services and infrastructure. These options would provide residents with good access to jobs through the incorporation of employment clusters to the south of the site. Additionally, positive effects are expected in relation to SA 7: sustainable travel as these options could create an opportunity for the Rapid Transit System to better connect with the University of Essex campus.

4.90 Mixed effects are expected for SA 3: Health as a reduction in open space would result in less access to greenspace for residents however the options would also provide new sports/recreation uses, which are likely to benefit residents of the new Garden Community as well as users of the university.

4.91 For SA objectives 6: Biodiversity and geological diversity, 9: Historic environment and townscape and 14: Landscape, these options are likely to result in negative effects as the expansion of land allocated for the University of Essex and knowledge-based employment site south of the A133 under the Latimer/ Lichfields and University of Essex refinements and directly north of the A133 under Greenstead Councillors and Community refinement would result in a reduction of greenfield land. As such, these options would result in loss, disturbance and fragmentation of existing habitats and could impact upon the setting of Wivenhoe Registered Park. Furthermore, development to the south of the A133 could result in a limited sense of separation between the Garden Community and the settlement of Wivenhoe to the south.

4.92 Additionally, the increase in impermeable built surfaces could increase surface water flood risk. The new development will also bring with it more residents and workers, with potential for transport-related air pollution and water pollution from contaminated surface runoff or from combined sewer overflows. As such, minor negative effects are also identified in relation to SA objectives 11: water resources and quality, 12: flood risk, 13: air quality and 15: soils and mineral resources. However, these effects are uncertain until the design and layout is confirmed.

4.93 Negligible effects are expected for SA objectives 1: safety and community cohesion, 2: Housing, 4: vitality and viability of centres and 10: energy efficiency and climate change.

Policy 1: Land uses and spatial approach

4.94 Policy 1 sets out the key land uses for the Garden Community and spatial parameters within which it is expected to be built. It also sets out the Councils’ expectations for the information that will need to be submitted and approved ahead of the determination of any planning applications for development of the site.

4.95 As discussed in the preceding section of this report, the Councils considered four options for the land uses and spatial parameters for the site. These options were originally presented in the Masterplan Design Options Report [See reference 26]. The appraisal of the four options considered was undertaken ‘policy-off’ (that is to say without considering the potential for mitigation to be achieved through detailed policy requirements in the DPD).

4.96 The appraisal of Policy 1 is based on the Council’s preferred approach for the spatial layout of the site as described in the policy text and accompanying key diagram, while also considering the mitigation that might be achieved through the requirements of the policy. The spatial layout described by Policy 1 represents an evolution of the preferred approach, option 3: maximum landscape, as presented in the Masterplan Design Options Report.

Table 4.4: Sustainability effects of Policy 1: Land Uses and Spatial Approach

SA Objective	Policy 1 Effect
SA 1: Safety and community cohesion	++
SA 2: Housing	++
SA 3: Health	++/-

SA Objective	Policy 1 Effect
SA 4: Vitality and viability of centres	++
SA 5: Economy	++
SA 6: Biodiversity and geological diversity	--/+
SA 7: Sustainable travel	++/-
SA 8: Services and infrastructure	++
SA 9: Historic environment and townscape	+/-
SA 10: Energy efficiency and climate change	++
SA 11: Water resources and quality	0
SA 12: Flood risk	+/-
SA 13: Air quality	++/-
SA 14: Landscape	++/-
SA 15: Soils and minerals resources	--

4.97 Policy 1 requires the Garden Community to be developed to be inclusive, safe and healthy. The development is to be provided across three distinct 'neighbourhoods' with each to be served by separate but interconnected 'neighbourhood centres'. At these locations a range of shops, jobs, services and community facilities, including education are to be accessible. The aim is to provide access to local services and facilities within a 20-minute walk or via cycling or public transport, making the Garden Community relatively self-contained. Furthermore, the development of the site is to be supported by the necessary infrastructure delivered in a timely manner, with its development to meet the needs and lifestyle choices of a variety of residents. Conflict with existing communities is expected to be reduced by the inclusion of strategic green gaps that address coalescence concerns raised in consultation and protection of the distinctive rural identity of Crockleford Heath by designation of an area of special character. Taken together, these policy requirements are

judged to result in a significant positive effect in relation to SA objective 1: safety and community cohesion.

4.98 The delivery of 6,500 to 8,000 new homes is supported though Policy 1. This includes homes of a variety of sizes, types, tenures and densities. The inclusion of a new site for the accommodation of gypsies and travellers within the Garden Community to be planned by reference to an up-to-date Gypsy and Traveller Needs Assessment and will contribute to meeting the accommodation needs of this community. Furthermore, 'Crockleford Neighbourhood' will accommodate 1,000 new homes as an individual community, this could include plots for self-build and custom build homes. As such, the policy supports a substantial number of new homes to contribute to the needs of Tendring and Colchester that would meet a range of needs and a significant positive effect is expected in relation to SA objective 2: housing.

4.99 The policy requires that proposals at the Garden Community contribute positively to health and wellbeing. Proposals are also required to accord with a future Strategic Masterplan for the site which is to be informed by the National Design Guide, National Model Design Code, Building for a Healthy Life and Building with Nature which will help ensure the creation of healthier places. As part of the infrastructure to be incorporated at the 'South and North Neighbourhoods', the policy requires that key infrastructure including that relating to health is provided from the early phases of development. Further to this, the policy proposes new sports facilities to be located south of the A133 at the University of Essex for use by residents and clubs in the existing community and the Garden Community. Considered in combination with the requirement for layout of the site to ensure that a range of services and facilities are easily accessible to residents, which is likely to help promote active modes of transport a significant positive effect is expected in relation to SA objective 3: health and wellbeing. This significant positive effect is expected in combination with a minor negative effect given the potential for the health implications (relating to noise, air and light pollution) of delivering development close to the A-roads at the northern and southern boundaries of the site and close to the new link road between these.

4.100 Through Policy 1 the delivery of the Garden Community is to achieve three interconnected neighbourhoods ('North', 'South' and 'Crockleford'), each developed around a 'neighbourhood centre'. The density of development across the Garden Community will vary across and within each neighbourhood area. This approach is to be supported by a creation of a highly connected site, achieved by the incorporation of walking, cycling and rapid transit system routes. As such the development is expected to be delivered in a manner which ensures that a large number of residents have access to services and facilities within 20 minutes. Further to the centres, 'hubs' will be provided around and along corridors between 'Neighbourhood centres' to provide further range of local business needs. The high level of access for Garden Community residents to the new neighbourhood centres and the provision of these centres to deliver new services and facilities from the early phases of development is likely to support their long term viability. A significant positive effect is therefore expected in relation to SA objective 4: vitality and viability of centres.

4.101 Policy 1 requires the delivery of employment land within the site principally at a new business park to the south of the A120 and east of the new A120/A133 Link Road. To the south west of the Garden Community a new 'knowledge-based employment' site with strong ties to the University of Essex will include new employment uses. Employment land is also to be incorporated in the new centres within the 'South' and 'North' neighbourhoods. The distribution of this employment land is likely to provide easy access to jobs for many residents. Access to these locations is to be supported by the rapid transit system, 'Park and Choose' facilities, and a network of walking and cycling routes incorporated at the site. These sustainable transport links will also support access to employment opportunities in the wider area such as the University of Essex, Colchester Town Centre, Colchester General Hospital and the Northern Gateway. A significant positive effect is therefore expected in relation to SA objective 5: economy.

4.102 The policy sets out the principle of development for the site, which contains several areas of ancient woodland, Salary Brook Local Nature Reserve and a number of Local Wildlife Sites to the west. Development at this location, considering the associated loss of greenfield and resultant increased in human activities, will have implications in terms of habitat loss, fragmentation and

disturbance. However, significant areas of the site are to be maintained as two undeveloped country parks and a strategic green gap. In line with the policy, the Salary Brook Country Park will incorporate land and woodland at and around Salary Brook Nature Reserve and provide connections with the wider green infrastructure network. The new Wivenhoe Country Park will incorporate land north of Brightlingsea Road and west of Elmstead Road and will connect with Wivenhoe Park and the University of Essex which will create habitats and connections for local wildlife. These measures are likely to secure benefits in terms of space for wildlife and habitat provision. Considering these potential benefits together with the potential for widespread impacts on existing habitats (including those which are undesignated), an overall mixed minor positive and significant negative effect is therefore expected in relation to SA objective 6: biodiversity and geological diversity. The potential for mitigation of the significant negative effect of the policy alone is considered in the cumulative effects chapter.

4.103 The delivery of development at the site will undoubtedly result in an increased number of journeys as homes and businesses are occupied. While private and commercial car access will be provided to the site, priority is to be given to sustainable modes. Furthermore, given the connectivity supported through the policy via new walking, cycling and rapid transit routes it is expected that many residents can make use of active and sustainable modes to meet many of their day to day needs. The incorporation of essential services and facilities at a centre within each new neighbourhood, as well as hubs and employment land across a number of locations at the Garden Community and achievement of higher, but appropriate levels of density, will further promote good access for residents and encourage journeys by more sustainable modes. The policy also requires that the delivery of essential infrastructure is phased so that it is available as soon as it is needed. As such, a mixed significant positive and minor negative effect is expected in relation to SA objective 7: sustainable travel. Given that the policy supports good access to a range of services and facilities for a majority of new residents at the new centres to be delivered within the Garden Community, a significant positive effect is also recorded in relation to SA objective 8: services and infrastructure.

4.104 By providing development at the Garden Community there is potential for impacts upon a number of designated heritage assets. This includes several listed buildings towards Crockleford Heath, Grade II Listed Allen's Farmhouse to the north east of the site and Wivenhoe Registered Park outside of the site boundary to the south west. Policy 1 requires development to occur following an appropriate approach to architecture, design, character, development density and public space, to achieve a distinctive sense of place. The approach to development is also required to consider the proximity of heritage assets. Furthermore, to the south of A133 and east of new A120/A133 Link Road and south of Allen's Farm, land will be maintained as part of the 'Elmstead Strategic Green Gap' where development will only be permitted if it is appropriate to a countryside location. Similarly, land at Crockleford is being designated as the 'Crockleford Heath Area of Special Character' to ensure development within this area considers the local character, heritage assets and their settings and the area's rural setting. The approach to development at these locations will help to limit adverse impacts on the settings of Wivenhoe Registered Park, heritage assets at Allen's Farm and Crockleford Heath. While the scale of development at the Garden Community has the potential to adversely affect the settings of the heritage assets in question, the requirements of Policy 1 will help mitigate the magnitude of any effects. Considering the mitigation set out in the policy, a mixed minor positive and minor negative effect is expected in relation to SA objective 9: historic environment and townscape.

4.105 The maintenance of significant areas of the Garden Community as undeveloped open space with links to the wider green infrastructure network will be of importance to support adaptation to climate change and the resilience to more extreme weather events, such as increased temperatures and flooding. Policy 1 also requires that the development of the Garden Community achieves a minimisation of greenhouse gas emissions through resource efficiency, minimisation of waste, reduction in embodied carbon and the prioritisation of renewable energy. Furthermore, the policy also requires that proposals mitigate and improve resilience to the effects of climate change. As such, a significant positive effect is expected in relation to SA objective 10: energy efficiency and climate change.

4.106 The Garden Community is not located within a Source Protection Zone (SPZ) which might otherwise mean that development might have potential for adverse effect relating to water quality. Policy 1 does not directly address water quality at the development. Policy safeguards are included in the Section 1 Local Plan, which ensures that a given development will not proceed until the necessary infrastructure upgrades have been provided as necessary in accordance with Anglian Water Services and Environment Agency advice. A Stage 2 IWMS has been commissioned and the findings of this will be incorporated into the Plan, masterplans and design codes. This evidence will be available to inform future work as part of the DPD process. The report will be able to inform further stages of masterplanning for the site and the SA for the submission plan. The IWMS Stage 1 report [See reference 27] was carried out for the Section 1 Local Plan and concluded for the three Garden Communities in North Essex considered as part of that plan, that there are workable wastewater options within the limits of conventional treatment which would not impact on the Water Framework Directive status of receiving waterbodies. A negligible effect is therefore expected in relation to SA objective 11: water resources and quality.

4.107 The Garden Community site contains a small number of areas of higher fluvial flood risk (including areas of flood zone 3) along Salary Brook to the west, although Policy 1 provides for a new Country Park and protection of an area of Ancient Woodland in this watercourse corridor. There are also small areas of 1 in 30 years surface water flood risk and medium ground water flood risk interspersed throughout the site. Policy 1 does not directly address flood risk at the site, although it is understood from the testing of masterplan options, that the Garden Community is to incorporate sustainable drainage systems and water management systems which mimic natural hydrological processes. While the policy preserves significant areas of the site area as undeveloped, where natural drainage patterns would likely continue, the development of a relatively large area of greenfield land would increase the amount of impermeable surfaces which could affect local flood risk or flood risk in the surroundings. Therefore, a mixed minor positive and minor negative effect is expected in relation to SA objective 12: flood risk.

4.108 The provision of the Garden Community to be relatively self-contained with access to a reliable rapid transit network as well as nearby services, facilities and jobs is likely to reduce the need to travel by private vehicle. As required by Policy 1, the provision of required infrastructure at the early phases of development of each neighbourhood area and promotion of walking, cycling and public transport will further support this approach. However, the occupation of new homes and businesses will nevertheless result in some need to travel across and beyond the site. While there is a trend towards less polluting and electric vehicles, these will still make some contribution to local air pollution. An overall mixed significant positive and minor negative effect is expected in relation to SA objective 13: air quality.

4.109 As discussed in relation to the historic environment, Policy 1 requires that development should be delivered at the Garden Community to achieve a distinctive sense of place. Furthermore, it requires that significant areas of land within the Garden Community are maintained as Country Parks and a Strategic Green Gap, preventing most forms of development in these locations. This approach will avoid the potential for coalescence between Colchester, Wivenhoe and Elmstead Market, thereby helping to preserve their individual character. Similarly, the creation of the 'Crockleford Heath Area of Special Character' will limit development at this location and preserve its rural setting. Regardless of the requirements set out in Policy 1 and the proposed site layout in the key diagram, the development of this large area of greenfield land, which presently forms part of the countryside to the east of the settlement of Colchester, will have implications for local character. The site has been assessed to have high to moderate landscape value and much of the area displays a degree of landscape sensitivity [See reference 28]. A mixed significant positive and minor negative effect is expected in relation to SA objective 14: landscape.

4.110 The majority of the Garden Community site falls within a mineral safeguarding area for sand and gravel and it is mostly greenfield land. Furthermore, much of the site comprises grade 1 agricultural land (excellent quality) with areas of grade 2 (very good) and 3 (good to moderate) interspersed. While Policy 1 maintains large areas of the Garden Community as undeveloped, its development would still involve the loss of large areas of

greenfield land and higher value agricultural soils to development. There is also potential for access to minerals to be adversely affected. A significant negative effect is therefore expected in relation to SA objective 15: soils and minerals resources.

Reasonable alternatives

4.111 As described earlier in this section three reasonable alternatives (option 1: maximum development footprint, option 2: maximum connectivity and option 3, approach B) as well as three refinements have been considered as part of the plan preparation process. The appraisal of these options is presented earlier in this report.

Policy 2: Requirements for all new development

4.112 Policy 2 sets out the minimum design criteria against which development proposals for the Garden Community will be considered. Part A of the policy provides the minimum planning criteria for ensuring development is well designed and relates well to its surroundings. Part B ensures that practical requirements have been addressed and Part C ensures that potential impacts on surrounding uses and/or the local environment are identified, and measures are put in place to ensure any adverse impacts are minimised. The likely sustainability effects of Policy 2 are set out in Table 4.5 and described below the table.

Table 4.5: Sustainability effects of Policy 2: Requirements for All New Development

SA Objective	Policy 2 Effect
SA 1: Safety and community cohesion	+
SA 2: Housing	0
SA 3: Health	+
SA 4: Vitality and viability of centres	0
SA 5: Economy	0
SA 6: Biodiversity and geological diversity	+?
SA 7: Sustainable travel	+
SA 8: Services and infrastructure	+
SA 9: Historic environment and townscape	+?
SA 10: Energy efficiency and climate change	+?
SA 11: Water resources and quality	+?
SA 12: Flood risk	+
SA 13: Air quality	+?
SA 14: Landscape	+
SA 15: Soils and minerals resources	+?

4.113 Policy 2 sets out a framework for all new development within the broad location for the Garden Community. This framework sets out criteria for design, practical requirements and impacts and compatibility. As such, minor positive effects are expected in relation to SA objectives 1: safety and community cohesion and 3: health as the policy aims to reduce the potential for crime and anti-social behaviour through the creation of safe spaces that create active places with natural surveillance and good design which is also likely to indirectly

improve the health and wellbeing of the community. In addition, all new development must prioritise walking, cycling and public transport which could encourage more active travel and promote higher levels of physical exercise. of the priority to be given to sustainable transport modes is also likely to result in minor positive effects in relation to SA objectives 7: sustainable travel and 8: services and infrastructure.

4.114 Minor positive effects are also expected in relation to SA objectives 6: biodiversity and geological diversity and 9: historic environment and townscape as this policy requires new development to maintain and enhance the local ecology and historic environment. However, this effect is uncertain until the design and layout is confirmed as there are multiple Local Wildlife Sites, patches of ancient woodland and heritage assets including a Registered Park and Garden within the broad location for the Garden Community that could be adversely affected. Additionally, the new development must integrate sustainable drainage systems which could enhance the local biodiversity, reduce flood risk and build the area's resilience to climate change. As such, minor positive effects are expected in relation to SA objective 12: flood risk.

4.115 The policy states that the new development must demonstrate how it will minimise greenhouse gas emissions and reduce its contribution to climate change through specific mitigation noted in other policies within the plan. The development must also minimise adverse effects on air, land and water quality. As such, a minor positive effect with uncertainty is expected in relation to SA objectives 10: energy efficiency and climate change, 11: water resources and quality, 13: air quality and 15: soils and mineral resources. However, the effects of Policy 2 alone are uncertain as they will also depend on the successful implementation of other, more specific policies in the Plan (e.g. Policy 3: Nature; Policy 8: Sustainable infrastructure) if some of the potential negative effects of development are to be avoided.

4.116 Minor positive effects are expected in relation to SA objective 14: landscape as the development must respect and enhance the local landscape character, views, and locally important features.

Reasonable alternatives

4.117 The Councils considered the following alternatives to this policy:

- Alternative 1: No policy in the Plan and reliance on the requirements of the Section 1 Plan and national policy.

4.118 The NPPF and adopted policies in the Section 1 Plan form part of the future baseline against which the DPD policies have been assessed. Alternative 1 does not, therefore, constitute a reasonable alternative for the purposes of the SA and has not been appraised.

Policy 3: Nature

4.119 Policy 3 aims to protect existing green-blue infrastructure and enhance the green-blue infrastructure network for the benefit of people and wildlife. It also seeks to protect and enhance existing historic assets as well as natural assets incorporating these as part of a well-connected green-blue infrastructure network to contribute to the distinctive character of the Garden Community. The likely sustainability effects of Policy 3 are set out in Table 4.6 and described below the table.

Table 4.6: Sustainability effects of Policy 3: Nature

SA Objective	Policy 3
SA 1: Safety and community cohesion	+
SA 2: Housing	-
SA 3: Health	+
SA 4: Vitality and viability of centres	0

SA Objective	Policy 3
SA 5: Economy	-
SA 6: Biodiversity and geological diversity	++
SA 7: Sustainable travel	+
SA 8: Services and infrastructure	+
SA 9: Historic environment and townscape	+
SA 10: Energy efficiency and climate change	+
SA 11: Water resources and quality	+
SA 12: Flood risk	+
SA 13: Air quality	+
SA 14: Landscape	++
SA 15: Soils and minerals resources	+

4.120 Policy 3 supports the provision of open and recreational space at the Garden Community. This includes two new Country Parks one along the Salary Brook corridor and the other connecting Wivenhoe Park and the University of Essex, natural play areas and community gardens. It is expected that the delivery of these features will support access to areas where residents can benefit from increased informal interactions between each other and help to support increased social cohesion. A minor positive effect is therefore expected in relation to SA objective 1: safety and community cohesion. Social inclusion is also supported through the policy given that there is a requirement relating to the provision for people with special educational needs and disabilities regarding allotments. Furthermore, the SuDS features are required to be designed to specifically consider the safety of young children, the elderly and those with reduced mobility.

4.121 Given the protection the policy sets out for specific areas of open space which are to remain undeveloped, certain areas will be identified as not suitable

for development. The policy also seeks to protect assets relating to biodiversity, heritage and landscape meaning that associated areas (for example areas of functionally linked habitats or those which contribute to the setting of the historic environment or landscapes of value) may also be deemed to be unsuitable for development. Minor negative effects are therefore expected for the policy in relation to SA objectives SA objective 2: housing and 5: economy.

4.122 The policy is expected to have a minor positive effect in relation to SA objective 3: health. While the policy does not support the provision of new or protect existing healthcare facilities at the Garden Community, it aims to protect and create spaces for recreation and leisure which might be used by residents as part of healthier lifestyles. Green-blue infrastructure incorporated at the site is required to meet the standards in the Colchester and Tendring Sports, Recreation and Open Space Strategy (2022) or updates to the strategy. This evidence-based approach is likely to help ensure residents have access to an appropriate amount and quality of open space. Furthermore, the multi-functional green-blue infrastructure network delivered within the site will encourage active travel, particularly as the Green-Blue Infrastructure Strategy aims to be co-ordinated with active travel networks. This network is to link to PROWs in the surrounding area which is likely to help encourage the uptake of trips by active travel within and beyond the Garden Community.

4.123 Policy 3 directly seeks to limit the potential for biodiversity assets to be adversely affected as the Garden Community is constructed and occupied. Measures to support the incorporation of trees, features that will support important species and natural habitats in line with Local Nature Recovery Strategies are required. The green-blue infrastructure network incorporated at the site will have benefits in relation to habitat provision and connectivity in the area and also will act as Suitable Accessible Natural Greenspace to help limit recreational trips to the sensitive Essex coast. A significant positive effect is therefore expected in relation to SA objective 6: biodiversity and geological diversity. The policy furthermore requires that development achieves a minimum of 10% measurable biodiversity net gain on-site.

4.124 Given that the policy requires the provision of walking and cycling infrastructure via green networks, minor positive effects are also expected in relation to SA objectives 7: sustainable travel, 8: services and infrastructure, 10: energy efficiency and climate change and 13: air quality. This includes links to the existing Colchester Orbital route. It is expected that this type of provision will help to limit journeys made by car and air pollution associated with this type of transport. The environmental mitigation to be provided in relation to the A120-A133 Link Road application will help to limit the potential for air quality issues to arise at this new route. The areas of green infrastructure provided at the site will be coordinated with active travel networks, and will also help to support carbon sequestration, as well as supporting the area's adaptation to the effects of climate change. This is likely to include increased resilience to changing flood risk and the increased average temperatures associated with climate change. Measures of benefit relating to these issues include the incorporation of SuDS incorporated as part of the green-blue infrastructure network and tree planting to support shading.

4.125 Minor positive effects are also expected for the policy in relation to SA objectives 11: water resources and quality and 12: flood risk. This reflects the benefits relating to the incorporation of SuDS. The positive effects also reflect the requirement in the policy to incorporate ditch habitat, reedbeds and pond networks as part of SuDS which will support the successful functioning of the water environment in the area. The policy also encourages rainwater reuse and use of permeable surfaces wherever possible.

4.126 Positive effects are also expected for the policy in relation to SA objectives 9: historic environment and townscape and 14: landscape. The policy directly aims to conserve and enhance heritage assets and landscape character most notably in relation to the natural environment. High quality design is to be incorporated at the site in relation to numerous elements of the site including public realm, tree planting and SuDS. It is expected that the protection of existing open spaces and green-blue infrastructure will help to preserve and potentially enhance the setting of the historic environment at the Garden Community as development is delivered. Given that the policy is explicitly supportive of the protection of natural features that will contribute to landscape character in the area, the positive effect expected in relation to SA objective 14

is expected to be significant. The policy specifically requires that a Green-Blue Infrastructure Strategy is prepared for the site to show how the green links at the site reflect the landscape setting, and that planning proposals must be supported with appropriate landscape and visual impact assessments.

4.127 The policy does not directly support the protection of higher quality agricultural soils or mineral resources at the Garden Community. However, the maintenance of a substantial area of the site as undeveloped open space will mean that there may be potential to make use of these resources within the site boundaries as part of garden Community's phased development. Policy 3 is supportive of the incorporation of allotments, orchards, edible walkways and community gardens at the Garden Community which will allow for appropriate use of the higher value soils present within the site. A minor positive effect is therefore expected for the policy in relation to SA objective 15: soils and minerals resources.

Reasonable alternatives

4.128 The Councils considered the following alternative to this policy:

- Alternative 1: No policy in the Plan and reliance on the requirements of the Section 1 Plan, which are summarised at the beginning of this chapter, and national policy.
- Alternative 2: A more prescriptive policy, which lists exactly what biodiversity mitigation and net gain and SuDS requirements are required and where.

4.129 The NPPF and adopted policies in the Section 1 Plan form part of the future baseline against which the DPD policies have been assessed. Alternative 1 does not, therefore, constitute a reasonable alternative for the purposes of the SA and has not been appraised.

4.130 Alternative 2 would provide more certainty for developers in terms of what is expected to be provided on site to help limit adverse impacts relating to

biodiversity assets in the Garden Community area. However, this approach would also be less flexible in terms of responding to changes in the natural environment over the lifetime of the Garden Community and changes in regard to biodiversity net gain, protected species, priority habitats and SuDS features. Therefore, while this approach could strengthen the significant positive effect expected in relation to SA objective 6: biodiversity and geological diversity it could also introduce an uncertain minor negative effect. Given that this approach would also affect SuDS provision and the incorporation of green-blue infrastructure which will also affect local flood risk, it could also help to strengthen the minor positive effect expected in relation to SA objective 12: flood risk. As this change to the effect relating to SA objective 6, an uncertain minor negative effect is also expected to be introduced in relation to SA objective considering the reduced flexibility to respond to local changing circumstances.

4.131 The consultation questions included in the draft DPD also highlighted the potential for a lower or higher biodiversity net gain and tree canopy cover target to be included in the document. If a lower target for both targets were adopted, it may be that schemes which otherwise might not be considered viable may become so in the Garden Community. This could have benefits in relation to the rate at development is delivered at the Garden Community, limiting the potential for the minor negative effect expected in relation to SA objective 2: housing and 5: economy.

4.132 However, this approach is also likely to limit the potential for the significant positive effect in relation to SA objective 6: biodiversity and geological diversity. Requiring a lower level of biodiversity net gain and tree canopy cover is likely to reduce the proportion of the Garden Community maintained as undeveloped areas of open space (most notably those which can be considered 'wild') which contribute to the setting of the area, allow for physical recreation and support the safe infiltration of surface water. This approach would also include reduced support for tree planting which otherwise is likely to support carbon sequestration. It may be that this approach therefore limits the potential for minor positive effects relating to SA objectives 3: health, 9: historic environment and townscape, 10: energy efficiency and climate change, 12: flood risk and 14: landscape.

Policy 4: Buildings, places and character

4.133 Policy 4 sets out the Councils’ expectation for the Garden Community to be unique and distinctive in its character and appearance, and for the new homes to meet high standards that will meet a variety of different needs and demands for people and families over the courses of their lives. Policy 4 is divided into 10 parts which identify the Councils’ expectations around housing mix, density, space standards, self-build and custom-built homes, specialist housing, student accommodation, accommodation for Gypsies and Travellers, and the information to be provided as part of planning applications. The likely sustainability effects of Policy 4 are set out in Table 4.7 and described below the table.

Table 4.7: Sustainability effects of Policy 4: Buildings, Places and Character

SA Objective	Policy 4 Effect
SA 1: Safety and community cohesion	+
SA 2: Housing	++
SA 3: Health	+
SA 4: Vitality and viability of centres	+
SA 5: Economy	+
SA 6: Biodiversity and geological diversity	+?
SA 7: Sustainable travel	+
SA 8: Services and infrastructure	+
SA 9: Historic environment and townscape	+?

SA Objective	Policy 4 Effect
SA 10: Energy efficiency and climate change	0
SA 11: Water resources and quality	+?
SA 12: Flood risk	+?
SA 13: Air quality	0
SA 14: Landscape	+?
SA 15: Soils and minerals resources	+/-

4.134 Minor positive effects are identified in relation to SA objectives 1: safety and community cohesion and 3: health as Policy 4 will adopt a landscape-led approach to design and will follow the NHS’s Healthy New Towns principles and Sport England’s Active Design principles which encourage active travel through safe and integrated walking and cycling routes and the provision of multifunctional spaces for sport, physical activities and social gatherings.

4.135 Policy 4 supports the provision of a mix of dwelling types, sizes and tenures, including affordable housing (at least 30% of all new homes in the Garden Community will be affordable housing, whilst 10% of all new homes will be provided for ‘affordable home ownership’), student accommodation, specialist housing for older and disabled people, and accommodation for Gypsies and Travellers. The policy requires housing development in the Garden Community to be designed to ensure positive integration between affordable housing and housing sold on the open market. All new homes and gardens will be required, as a minimum, to meet and where possible to exceed the standards set out in the Government’s ‘Technical Housing Standards’, Design Codes, and the Building Regulations Part M4(2) and (3) ‘Adaptable and Accessible Standards’ and ‘Wheelchair-Users’. Overall, a significant positive effect is expected for SA objective 2: housing.

4.136 Policy 4 requires the density of new housing in the Garden Community (ranging across the site 30-100 dwellings per hectare) to be higher around centres of activity (including the mixed-use neighbourhoods), transport corridors

and Rapid Transit System stops and lower in more sensitive locations. Therefore, minor positive effects are expected for SA objectives 4: vitality and viability of centres, 7: sustainable travel, and 8: services and infrastructure.

4.137 A minor positive effect is expected for SA objective 5: economy as the policy requires housing to be designed to facilitate home working by including innovative approaches to home working which will support flexible working and a mix of employment opportunities.

4.138 A minor positive effect is expected for SA objective 9: historic environment and townscape as Policy 4 supports the creation of a Garden Community which will be a unique place with distinctive character that takes a positive and innovative approach to architecture, urban design, landmarks and public realm provision. This includes a requirement for planning applications to produce a mitigation strategy to demonstrate the measures that can minimise harm and maximise the potential to enhance the heritage significance of several heritage assets in the area. It also requires an archaeological assessment of proposals in the vicinity of the Round Barrows. This positive effect is reinforced, and minor positive effects are identified for SA objectives 6: biodiversity and geological diversity, 11: water resources and quality, 12: flood risk, and 14: landscape, as the policy also requires the density of housing in the Garden Community to consider several criteria including impacts on designated and non-designated heritage and environmental assets, including their settings; and the need for an appropriate transition between built development and sensitive areas such as the open countryside and the Crockleford Heath Area of Special Character. Furthermore, a comprehensive landscape and visual impact assessment of any detailed phased development proposals is required by Policy 4 which will help to ensure proposals minimise their impact on the existing landscape character and sensitive receptors in the surrounding settlements and countryside. However, these positive effects are uncertain until the design and layout of the Garden Community is confirmed as there are multiple Sites of Special Scientific Interest (SSSIs), Local Wildlife Sites (LWSs), Areas of Special Character, areas of ancient woodland, hedgerows, grasslands, wetlands and heritage assets within or in close proximity to the Garden Community that could be adversely affected. The minor positive effects identified in relation to the historic environment, biodiversity, flooding, water

quality, and landscape are also reinforced as the policy seeks to direct development away from sensitive ecological, landscape and heritage locations.

4.139 Negligible effects are identified for SA objectives 10: energy efficiency and climate change and 13: air quality.

4.140 A minor positive effect is mixed with a minor negative effect for SA objective 15: soils and minerals resources as the policy seeks to deliver appropriate densities of development which will limit the need for development of greenfield land, however, the scale of development proposed in the Garden Community will result in the loss of best and most versatile agricultural land.

Reasonable alternatives

4.141 The Councils considered the following alternatives to this policy:

- Alternative 1: No policy in the Plan and reliance on the requirements of the Section 1 Plan and national policy.
- Alternative 2: A more detailed and prescriptive approach including a detailed Masterplan and Design Code and very detailed requirements and standards.

4.142 The NPPF and adopted policies in the Section 1 Plan form part of the future baseline against which the DPD policies have been assessed. Alternative 1 does not, therefore, constitute a reasonable alternative for the purposes of the SA and has not been appraised.

4.143 Alternative 2 is likely to strengthen the positive effects and remove the uncertainty identified in relation to the potential impacts on SA objectives 6: biodiversity and geological diversity, 9: historic environment and townscape, 11: water resources and quality, 12: flood risk, and 14: landscapes. A positive effect would be expected for SA objective 10: energy efficiency and climate change as it is likely that the design code would include a requirement to utilise renewable

energy to generate electricity for the Garden Community and to incorporate passive design principles to optimise site layout, building form and orientation to minimise energy consumption.

Policy 5: Economic activity and employment

4.144 Policy 5 sets out the approach to maximising the economic potential of the Garden Community and how that will be achieved. It aims to create a diverse range of jobs and as many job opportunities as possible that are within a commutable distance with an overall aim of creating at least one job per new household. The likely sustainability effects of Policy 5 are set out in Table 4.8 and described below the table.

Table 4.8: Sustainability effects of Policy 5: Economic Activity and Employment

SA Objective	Policy 5 Effect
SA 1: Safety and community cohesion	0
SA 2: Housing	+
SA 3: Health	+
SA 4: Vitality and viability of centres	++
SA 5: Economy	++
SA 6: Biodiversity and geological diversity	-?
SA 7: Sustainable travel	++
SA 8: Services and infrastructure	++
SA 9: Historic environment and townscape	-?

SA Objective	Policy 5 Effect
SA 10: Energy efficiency and climate change	0
SA 11: Water resources and quality	-?
SA 12: Flood risk	-?
SA 13: Air quality	+/-?
SA 14: Landscape	-?
SA 15: Soils and minerals resources	-?

4.145 Significant positive effects are expected in relation to SA objectives 5: economy and 8: services and infrastructure. Policy 5 aims to create a wide range of opportunities for employment, education and training with the overall aim of creating one easily commutable job per household. Furthermore, all development proposals must demonstrate how they will maximise the opportunities for local people to access training and employment in the construction of the Garden Community, this includes requiring development proposals to be accompanied by an Employment and Skills Plan as well as an Economic and Employment Strategy. Additionally, a partnership between the Councils, University of Essex, the Colchester Institute and other local educational establishments and developers will be formed to increase capacity and improve facilities to deliver training in 'growth sectors'.

4.146 Significant positive effects are also expected in relation to SA objective 7: sustainable travel as a Rapid Transit System will be created to enable a rapid and easy commute for residents to and from all neighbourhoods within the Garden Community to key employment areas outside of the Community. As such, this is likely to encourage residents to use public transport when travelling. Sustainable travel behaviour will also be supported by the policy’s goal of creating employment opportunities within or close to new homes, the creation of neighbourhood centres, and construction of new homes with the highest standard of broadband access.

4.147 Significant positive effects are also expected in relation to SA objective 4: vitality and viability of centres as this policy supports the creation of new centres to provide a range of retail and community spaces. Furthermore, some of the new centres to be delivered will incorporate health facilities and employment land. This range of provision is likely to create resilient local centres. Furthermore, minor positive effects are expected in relation to SA objective 3: health. This is because the creation of local centres with a wide range of amenities could encourage social interaction and help to ensure access to health facilities.

4.148 Minor positive effects are expected in relation to SA objective 2: housing because this policy supports the construction of new homes that are adaptable and flexible to home working and have the highest standard of broadband access. This will ensure futureproof new homes to support homeworking.

4.149 As this policy aims to develop new centres and a Rapid Transit System and expand the University of Essex and the Knowledge Gateway, there is the potential for negative effects on local ecological and historic assets and the landscape and for loss of high-quality agricultural land. Additionally, the increase in impermeable built surfaces could increase surface water flood risk. The new development will also bring with it more residents and workers, with potential for transport-related air pollution and water pollution from contaminated surface runoff or from combined sewer overflows. As such, minor negative effects are identified in relation to SA objectives 6: biodiversity and geological diversity, 9: historic environment and townscape, 11: water resources and quality, 12: flood risk, 13: air quality, 14: landscape, and 15: soils and mineral resources. However, these effects are uncertain until the design and layout is confirmed as, for example there are multiple Local Wildlife Sites, patches of ancient woodland and heritage assets including a Registered Park and Garden within the broad location for the Garden Community which could be adversely affected. Minor positive effects are also expected in relation to SA objective 13: air quality as the creation of the Rapid Transit System is likely to reduce air pollution and traffic congestion.

Reasonable alternatives

4.150 The Councils considered the following alternatives to this policy:

- Alternative 1: No policy in the Plan and reliance on the requirements of the Section 1 Plan and national policy.

4.151 The NPPF and adopted policies in the Section 1 Plan form part of the future baseline against which the DPD policies have been assessed. Alternative 1 does not, therefore, constitute a reasonable alternative for the purposes of the SA and has not been appraised.

Policy 6: Community and social infrastructure

4.152 Policy 6 sets out how the Garden Community will deliver a range of local community services and facilities, including opportunities for joint provision and co-location to provide services which best meet people’s needs, are accessible to all and are innovative. The likely sustainability effects of Policy 6 are set out in Table 4.9 below and described below the table.

Table 4.9: Sustainability effects of Policy 6: Community and Social Infrastructure

SA Objective	Policy 6 Effect
SA 1: Safety and community cohesion	++
SA 2: Housing	0
SA 3: Health	++
SA 4: Vitality and viability of centres	++

SA Objective	Policy 6 Effect
SA 5: Economy	+
SA 6: Biodiversity and geological diversity	+?
SA 7: Sustainable travel	++
SA 8: Services and infrastructure	++
SA 9: Historic environment and townscape	+?
SA 10: Energy efficiency and climate change	+?
SA 11: Water resources and quality	0
SA 12: Flood risk	0
SA 13: Air quality	+
SA 14: Landscape	+?
SA 15: Soils and minerals resources	0

4.153 Policy 6 aims to deliver local community services and facilities that meet the Garden Community’s needs, are innovative, multipurpose, and accessible to all. This policy seeks to create neighbourhoods with local centres that include a diverse range of uses, including community and healthcare space in addition to an inclusive public realm that is safe and connects the community with the natural environment. In addition, proposals are required to be accompanied by a Health Strategy that sets out what health and wellbeing services will be provided. Additionally, proposals must include a new Health Centre, flexible space for health provision and enhancements to existing facilities, including those in locally accessible locations. Therefore, significant positive effects are expected in relation to SA objective 1: safety and community cohesion and 3: health because it is likely that services and facilities will be aimed at all types of groups, include cultural infrastructure and access to community facilities will be improved directly benefiting the health and wellbeing of the community. Positive effects on health will be reinforced by the policy requirements for education facilities, high quality open space, safe places for active play, flexible space to

enable activities to support the wider determinants of health and the community and for these and other community facilities to be accessible by walking and cycling. Significant positive effects are also expected in relation to SA objective 4: vitality and viability of centres as the policy aims to create neighbourhoods with local centres that include a diverse range of uses including retail and community space. New local centres must create a sense of place and improve the range of employment opportunities within the area. As such, a minor positive effect is expected in relation to SA objective 5: economy.

4.154 Minor positive effects are expected in relation to SA objective 6: biodiversity and geological diversity as the creation of high-quality open space could create additional habitats for local wildlife. The requirement for all schools to be well connected to the natural environment will help to educate young people in its value, supporting its long-term stewardship. Additionally, the policy seeks to create high quality landscape and public realm design and open space, including requiring sports facilities to be well integrated into the built environment and well designed in terms of their landscape settings, which could have minor positive effects on SA objectives 9: historic environment and townscape and 14: landscape. However, all of these effects are uncertain until the design and layout is confirmed as there are multiple Local Wildlife Sites, patches of ancient woodland and heritage assets including a Registered Park and Garden within the broad location for the Garden Community which could be adversely affected.

4.155 One of the core principles behind the Garden Community is that it will be planned around a network of traffic-free walking and cycling routes with public transport options dispersed throughout. As such, the neighbourhoods will be accessible by a comprehensive and integrated sustainable travel network which will encourage active travel and improve the availability of sustainable transport modes. Furthermore, access to services and facilities will be improved and schools, early year and childcare facilities will be provided and centrally located. As such, significant positive effects are expected in relation to SA objectives 7: sustainable travel and 8: services and infrastructure.

4.156 The supporting text states that there is an expectation that the new schools will be carbon positive; as such minor positive effects with uncertainty are expected in relation to SA objective 10: energy efficiency and climate change. This is because it is likely renewable energy sources will be used for the generation of energy and offsetting measures will be taken to mitigate any greenhouse gas emissions to become carbon positive. Creating carbon positive schools as well as a cohesive masterplanned Garden Community based around accessible walking, cycling and public transport options is likely to reduce air pollution and traffic congestion. Therefore, minor positive effects are also expected in relation to SA objective 13: air quality.

Reasonable alternatives

4.157 The Councils considered the following alternatives to this policy:

- Alternative 1: No policy in the Plan and reliance on the requirements of the Section 1 Plan and national policy.

4.158 The NPPF and adopted policies in the Section 1 Plan form part of the future baseline against which the DPD policies have been assessed. Alternative 1 does not, therefore, constitute a reasonable alternative for the purposes of the SA and has not been appraised.

Policy 7: Movement and connections

4.159 Policy 7 sets out the policy expectations in relation to movement and connections in the Garden Community. The key objectives and principles for the Garden Community are to ensure neighbourhoods are walkable, low traffic and liveable, where residents can access most of their daily needs within a 20-minute short walk or bike ride from their home. The Garden Community will be designed and built in a way that reduces the need to travel, especially by car, and enables new ways of working and service delivery that supports remote

working and digital solutions. The likely sustainability effects of Policy 7 are set out in Table 4.10 below and described below the table.

Table 4.10: Sustainability effects of Policy 7: Movement and Connections

SA Objective	Policy 7 Effect
SA 1: Safety and community cohesion	+
SA 2: Housing	0
SA 3: Health	++
SA 4: Vitality and viability of centres	+
SA 5: Economy	+
SA 6: Biodiversity and geological diversity	+?
SA 7: Sustainable travel	++/-
SA 8: Services and infrastructure	++
SA 9: Historic environment and townscape	+?
SA 10: Energy efficiency and climate change	+
SA 11: Water resources and quality	+?
SA 12: Flood risk	+
SA 13: Air quality	++/-
SA 14: Landscape	+?
SA 15: Soils and minerals resources	-

4.160 A minor positive effect is expected for SA objective 1: safety and community cohesion as Policy 7 requires all active travel routes and transport

infrastructure hubs to be safe and accessible to all, with convenient, direct, inclusive routes that are well-lit with natural surveillance.

4.161 A negligible effect is identified for SA objective 2: housing.

4.162 A significant positive effect is identified for SA objective 3: health as Policy 7 strongly supports the delivery of active travel routes throughout the Garden Community that are accessible for all abilities which will support healthy and active lifestyles. In addition, proposals are required to have regard to Active Design principles and the Building for a Healthy Life process when designing the public realm and streets. Each neighbourhood in the Garden Community will have a range of amenities, facilities and services, including employment opportunities, all accessible by active travel and sustainable transport routes, including the requirement that all proposals will need to demonstrate how they link to the Rapid Transit System to each centre and the provision of mobility and micro-mobility hubs. This will promote accessibility to services, and will support the vitality and viability of the neighbourhoods and the local economy, resulting in a significant positive effect for SA objective 8: services and infrastructure and minor positive effects for SA objectives 4: vitality and viability of centres and 5: economy. The positive effect for SA objective 5: economy is reinforced by the fact that the Garden Community will provide sustainable transport routes to employment centres beyond the Garden Community including to Colchester and London.

4.163 Policy 7 requires all active travel routes and transport infrastructure hubs to be designed as green corridors incorporating street trees, linear SuDS features, wildlife verges and other green-blue infrastructure. It also requires streets and public realms to be attractive and safe spaces, created around a modal or user hierarchy with pedestrians at the top of the hierarchy as well as design these spaces to limit and manage vehicle speeds and street parking. Therefore, minor positive effects are expected for SA objectives 6: biodiversity and geological diversity, 9: historic environment and townscape, 11: water resources and quality, 12: flood risk, and 14: landscapes. However, these positive effects are uncertain until the design and layout of the Garden Community is confirmed as there are multiple Sites of Special Scientific Interest

(SSSIs), Local Wildlife Sites (LWSs), Areas of Special Character, areas of ancient woodland, hedgerows, grasslands, wetlands and heritage assets within or in close proximity to the Garden Community that could be adversely affected by the scale of development proposed, including transport corridors, in the Garden Community.

4.164 Policy 7 requires the Garden Community to be designed with active travel and sustainable transport infrastructure, including a Rapid Transit System and Park and Choose facilities, at its core. This includes creating a network of safe and accessible walking, cycling and public transport routes with connections to key destinations within and beyond the Garden Community including the University of Essex, Colchester, and London. Each neighbourhood in the Garden Community will have a range of amenities, facilities, and services all accessible by active travel modes (all homes will be within 400m of a traffic-free route and the policy's supporting text states that all homes and employment centres will be within 400m of a mobility hub) which reduce the need to travel by private car to access these services further afield. The Garden Community will also be designed to integrate with the A120/A133 Link Road and deliver parking facilities although the development of the Link Road will focus on measures which maintain and promote walking, cycling and horse-riding connectivity throughout the site. Overall, mixed effects (significant positive / minor negative) are expected for SA objectives 7: sustainable travel and 13: air quality as the Garden Community will deliver a range of services and facilities in each neighbourhood which reduces the need to travel further afield to access these services and will prioritise sustainable modes of travel as the main mode of choice for travel around the Garden Community. This will also help to reduce private vehicle traffic and improve air quality along key transport routes. Minor negative effects cannot be ruled out for these SA objectives as private car travel may be encouraged with the delivery of connections to the A120/A133 Link Road and parking facilities.

4.165 Policy 7 supports the incorporation of rapid electric vehicle charging points or similar technology at any taxi ranks located at sites such as centres or Park and Choose sites. Additionally, proposals must help achieve the decarbonisation of transport by 2050 which will have a positive effect on SA objective 10: energy efficiency and climate change. A minor negative effect is

identified for SA objective 15: soils and minerals resources as the scale of development proposed in the Garden Community, including transport routes, will result in the loss of best and most versatile agricultural land.

Reasonable alternatives

4.166 The Councils considered the following alternatives to this policy:

- Alternative 1: No policy in the Plan and reliance on the requirements of the Section 1 Plan and national policy.
- Alternative 2: A less comprehensive policy but with further detail provided in design codes.
- Alternative 3: Include the Garden Community Parking Standards in Policy 7: Movement and Connections (this was raised as a consultation question).

4.167 The NPPF and adopted policies in the Section 1 Plan form part of the future baseline against which the TCBCG Plan policies have been assessed. Alternative 1 does not, therefore, constitute a reasonable alternative for the purposes of the SA and has not been appraised.

4.168 Alternative 2 is likely to result in more uncertain and negligible effects being identified as the policy would not comprehensively detail the requirements for movement and connectivity within the Garden Community.

4.169 Through Alternative 3, the addition of criteria relating to parking standards in Policy 7 would provide more certainty as to what will be required to be delivered in terms of parking. This additional detail could result in strengthening of the adverse effects identified as part of the mixed effects (significant positive / minor negative) in relation to SA objectives 7: sustainable travel and 13: air quality given that private car travel may be encouraged with the delivery of connections to the A120/A133 Link Road and parking facilities. The provision of increased parking facilities at the Garden Community could also strengthen the

minor positive effect recorded in relation to SA objective 2: safety and community cohesion by supporting access for groups who might otherwise not be able to access certain services and facilities given their increased potential to experience mobility issues. This includes groups such as older people and people with disabilities.

Policy 8: Sustainable infrastructure

4.170 Policy 8 sets out infrastructure requirements for the Garden Community that are intended to ensure that it will be an exemplar development in relation to carbon emissions, energy efficiency, renewable energy generation, water efficiency, sustainable materials use and waste management, digital connectivity, and mineral resource preservation. The likely sustainability effects of Policy 8 are set out in Table 4.11 and described below the table.

Table 4.11: Sustainability effects of Policy 8: Sustainable infrastructure

SA Objective	Policy 8 Effect
SA 1: Safety and community cohesion	+
SA 2: Housing	0
SA 3: Health	+
SA 4: Vitality and viability of centres	0
SA 5: Economy	0
SA 6: Biodiversity and geological diversity	+
SA 7: Sustainable travel	0
SA 8: Services and infrastructure	+
SA 9: Historic environment and townscape	0

SA Objective	Policy 8 Effect
SA 10: Energy efficiency and climate change	++
SA 11: Water resources and quality	++
SA 12: Flood risk	+
SA 13: Air quality	+
SA 14: Landscape	0
SA 15: Soils and minerals resources	+

4.171 Policy 8 supports development of a community/district energy network and/or smart local energy systems. It also requires the use of socially responsible materials in construction. These measures are expected to help foster community cohesion. It is also notable that the overall goal of a development that is net zero carbon and an exemplar of sustainability appears to be supported by the engagement feedback summarised in the plan and could act as a focus for community cohesion. As such, minor positive effects are expected in relation to SA objective 1: safety and community cohesion. This community energy network and various policy measures designed to deliver well designed, sustainable housing, including energy efficient buildings whilst avoiding overheating should help to provide warm, comfortable homes for residents that are affordable to heat, with minor positive effects in relation to SA objectives 2: housing and 3: health.

4.172 The policy requirement for the new community to be served by ultrafast broadband and enhanced mobile phone network capacity and improvements will facilitate homeworking for residents and efficiency for businesses in the Garden Community. The requirement for proposals to be informed by a Minerals Resource Assessment will help to avoid sterilisation of mineral resources. Together, these are considered to have minor positive effects in relation to SA objective 5: economy.

4.173 SA objective 8: services and infrastructure is mainly concerned with the provision of the social infrastructure (e.g. schools, GPs, shopping, leisure) and

utilities necessary to support development rather than the types provided for by this policy, therefore only minor positive effects are identified.

4.174 Significant positive effects are expected from this policy in relation to SA objective 10: energy efficiency and climate change. Energy efficiency and climate change mitigation will be achieved via requirements for net zero carbon buildings, principles of the energy hierarchy in construction and operation, energy efficient building design and use of materials with low embodied carbon, generation of energy requirements from renewable sources, waste minimisation and a circular economy approach, and an Energy and Carbon Reduction Strategy to accompany proposals. These measures are also expected to have minor positive effects in relation to SA objective 13: air quality, by reducing the need for energy generation by fossil fuel combustion. Additionally, multifunctional green-blue infrastructure will be delivered across the Garden Community which has positive effects on climate change adaptation through flood risk management and reducing urban heat island effect and overheating. Further to this, proposals must provide a diverse range of plant species that are resilient to climate change which would provide additional habitats for local wildlife. As such, minor positive effects are expected in relation to SA objectives 6: biodiversity and geological diversity and 12: flood risk. .

4.175 The policy sets out that all buildings must include water efficiency measures and seek to achieve water neutrality, with proposals required to submit a water efficiency calculator report. Furthermore, water conservation measures such as the re-use of 'greywater' and rainwater 'capture and re-use' should be utilised. Therefore, significant positive effects are also expected from this policy in relation to SA objective 11: water resources and quality.

4.176 The requirement for proposals to be informed by a Minerals Resource Assessment will help to avoid sterilisation of mineral resources, resulting in minor positive effects in relation to SA objective 15: Soils and minerals resources. Efficient use of land via appropriate development density and avoidance of high quality agricultural land are not covered by this policy.

Reasonable alternatives

4.177 The Councils considered the following alternative to this policy:

- Alternative 1: No policy in the Plan and reliance on the requirements of the Section 1 Plan, which are summarised at the beginning of this chapter, and national policy.

4.178 The NPPF and adopted policies in the Section 1 Plan form part of the future baseline against which the TCBCG Plan policies have been assessed. Alternative 1 does not, therefore, constitute a reasonable alternative for the purposes of the SA and has not been appraised.

Policy 9: Infrastructure delivery and impact mitigation

4.179 Policy 9 requires proposals to demonstrate that there is sufficient appropriate infrastructure capacity to support the development or that such capacity will be delivered in a timely and, where appropriate, phased manner by the proposal. Where new or improved infrastructure is required, the policy sets out the mechanisms by which it should be provided. The likely sustainability effects of Policy 9 are set out in Table 4.12 and described below the table.

Table 4.12: Sustainability effects of Policy 9: Infrastructure delivery and impact mitigation

SA Objective	Policy 9 Effect
SA 1: Safety and community cohesion	+
SA 2: Housing	+

SA Objective	Policy 9 Effect
SA 3: Health	+
SA 4: Vitality and viability of centres	+
SA 5: Economy	+
SA 6: Biodiversity and geological diversity	+
SA 7: Sustainable travel	+
SA 8: Services and infrastructure	+
SA 9: Historic environment and townscape	+
SA 10: Energy efficiency and climate change	+
SA 11: Water resources and quality	+
SA 12: Flood risk	+
SA 13: Air quality	+
SA 14: Landscape	+
SA 15: Soils and minerals resources	+

4.180 Policy 9 does not relate to any particular types of infrastructure, instead it states that the widest reasonable definition of infrastructure will be applied. The policy defines processes and mechanisms that should ensure that all types of infrastructure that are necessary for sustainable development are provided, taking account of the cumulative effects of development on infrastructure capacity and the need for development to remain financially viable. The requirement for infrastructure to be provided in a timely and, where appropriate, phased manner should help to ensure that sustainable behaviours, for example use of public or active travel modes, can be followed as soon as new homes are occupied, helping to establish these for the long term. Taken together, these policy elements are expected to support and increase the certainty of the positive sustainable effects identified for other policies, particularly policy 6:

community and social infrastructure and policy 8: sustainable infrastructure.
Overall, minor positive effects are expected across all SA objectives.

Reasonable alternatives

4.181 No reasonable alternatives were identified for this policy.

Chapter 5

Cumulative Effects

5.1 The preceding chapter appraises the sustainability effects of each policy within the Tendring Colchester Borders Garden Community DPD on its own merits. This chapter brings together the effects identified for these separate elements to identify cumulative and synergistic effects of the Plan as a whole.

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

Table 5.1: Summary of SA effects for policies in the Tendring Colchester Borders Garden Community Development Plan Document

SA Objective	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10	SA11	SA12	SA13	SA14	SA15
Key Vision Theme Nature	+	-	+	0	-	+	+	0	+	+	+	+	+	+	0
Key Vision Theme Movement and Connections	+	0	+	+	0	0	+	+	0	+	0	0	+	0	0
Key Vision Theme Community and Social Infrastructure	+	0	+	0	0	0	+	+	0	+	0	0	+	0	0
Key Vision Theme Buildings, places and character	+	+	0	0	+	0	0	0	0	+	0	0	0	+	0
Key Vision Theme Sustainable infrastructure	0	+	+	0	0	+	+	0	0	+	0	+	+	+	0
1: Land Uses and Spatial Approach	++	++	++/-	++	++	--/+	++/-	++	+/-	++	0	+/-	++/-	++/-	--
2: Requirements for All New Development	+	0	+	0	0	+?	+	+	+?	+?	+?	+	+?	+	+?
3: Nature	+	-	+	0	-	++	+	+	+	+	+	+	+	++	+
4: Buildings, Places and Character	+	++	+	+	+	+?	+	+	+?	0	+?	+?	0	+?	+/-
5: Economic Activity and Employment	0	+	+	++	++	-?	++	++	-?	0	-?	-?	+/-?	-?	-?
6: Community and Social Infrastructure	++	0	++	++	+	+?	++	++	+?	+?	0	0	+	+?	0
7: Movement and Connections	+	0	++	+	+	+?	++/-	++	+?	+	+?	+?	++/-	+?	-
8: Sustainable Infrastructure	+	0	+	0	0	+	0	+	0	++	++	+	+	0	+
9: Infrastructure Delivery and Impact Mitigation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Table 5.2: Summary of Likely Cumulative Effects for the DPD

SA Objective	Cumulative Effects for the DPD
1. Safety and community cohesion	++
2. Housing	++
3. Health	++
4. Vitality and viability of centres	++
5. Economy	++
6. Biodiversity and geological diversity	+/-
7. Sustainable travel	++/-
8. Services and infrastructure	++
9. Historic environment and townscape	-?
10. Energy efficiency and climate change	++
11. Water resources and quality	++?
12. Flood risk	+
13. Air quality	++/-
14. Landscape	+
15. Soils and minerals resources	--?

SA Objective 1: To create safe environments which improve quality of life, community cohesion

5.3 The DPD has a strong focus on creating three 'neighbourhoods' each to be served by separate but interconnected 'neighbourhood centres' within the Garden Community that aim to reduce the potential for crime and anti-social behaviour through the creation of safe spaces and good design thereby improving community cohesion particularly via Policies 1: Land Uses and Spatial Approach and 6: Community and Social Infrastructure. As such, cumulative significant positive effects (++) are expected for this SA objective.

SA Objective 2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

5.4 The DPD provides for 6,500 to 8,000 new homes to be delivered in the Garden Community. Policy 1: Land Uses and Spatial Approach supports the delivery of a wide range of homes varying in size, type, tenure and density. In addition, the inclusion of a new site for the accommodation of gypsies and travellers within the Garden Community is to be planned to help meet the accommodation needs of this community. Policy 4: Buildings, Places and Character supports the provision of affordable housing, student accommodation and specialist housing for older and disable people. As such, cumulative significant positive effects (++) are expected for this SA objective.

SA Objective 3: To improve health/reduce health inequalities

5.5 In providing a substantial new number of homes and jobs, the DPD will contribute to improving human health and wellbeing by helping to ensure that everyone has access to suitable housing and employment. In addition, the DPD strongly supports active travel, particularly through Policy 7: Movement and Connections which will help deliver active travel routes throughout the Garden Community that are accessible for all abilities, thereby supporting healthy and active lifestyles.

5.6 Physical, mental and social wellbeing will also benefit from the provision of local services, facilities and infrastructure and open space, particularly those that encourage community cohesion and recreation, such as Policies 1: Land Uses and Spatial Approach and 6: Community and Social Infrastructure.

5.7 However, Policy 1 is also expected to have minor negative effects given the potential for the health implications of delivering development close to the A roads at the northern and southern boundaries of the site and close to the new link road between these. These effects are likely to be mitigated through Section 1 Local Plan policy SP 9: Tendring/Colchester Borders Garden Community as a network of multi-functional green infrastructure will be provided which could act as a barrier to any air and noise pollution. It is noted that while the Masterplan Design Final Report specifies landscape buffers between development and these major roads, this is not an explicit requirement in the DPD policies or key diagram. Details of such features would be developed up in more precise detail through the future Strategic and Neighbourhood Masterplans for the site and the subsequent planning applications.

5.8 Overall, cumulative significant positive effects (++) are expected for this SA objective.

SA Objective 4: To ensure and improve the vitality and viability of centres

5.9 Through Policy 1: Land Uses and Spatial Approach, the delivery of the Garden Community aims to achieve three distinct but interconnected neighbourhoods, each to be served by separate but interconnected 'neighbourhood centres'. Policy 4: Buildings Places and Character requires higher housing density in locations with good accessibility to facilities, which should help to ensure a critical mass of residents accessing the service centres. Furthermore, through Policies 5: Economic Activity and Employment and 6: Community and Social Infrastructure the new centres are to provide a range of employment, retail, community and health spaces. This range of provision is likely to create resilient local centres. Overall, cumulative significant positive effects (++) are expected in relation to this SA objective.

SA Objective 5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

5.10 The DPD requires the delivery of employment land within the site principally at a new business park and through the expansion of the University of Essex. Additionally, via Policy 1: Land Uses and Spatial Approach new centres will incorporate the allocation of employment land within each neighbourhood. Policy 5: Economic Activity and Employment also states that all development proposals must also demonstrate how they will increase capacity

and improve facilities to deliver training in 'growth sectors' of the Garden Community. Overall, cumulative significant positive effects (++) are expected in relation to this SA objective.

SA Objective 6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

5.11 The DPD promotes the protection and enhancement of biodiversity through the provision of green-blue infrastructure, tree planting and biodiversity net gain targets via Policy 3: Nature. Also, Policy 6: Community and Social Infrastructure promotes the creation of high-quality open space which could create additional habitats for local wildlife. Nevertheless, the development of the Garden Community set out in Policy 1: Land Uses and Spatial Approach, could result in habitat loss, fragmentation and disturbance as the site contains several areas of ancient woodland, Salary Brook Local Nature Reserve and a number of Local Wildlife Sites to the west. It is expected that a development of this sizeable scale would result in some level of adverse effect in relation to biodiversity regardless of the mitigation provided, given the associated level of greenfield land take, construction and human activities (including travel to and from the site) as the site is occupied. However, significant areas of the site are to be maintained as an undeveloped strategic green gap and two new country parks are to be delivered at the Garden Community.

5.12 The potential negative effects from Policy 1 are likely to be mitigated through Section 1 Local Plan policies SP 7: Place Shaping Principles and SP 9: Tendring/Colchester Borders Garden Community as they state development must incorporate biodiversity creation and enhancement measures. Additionally, the new country park will provide new habitat and buffer Salary Brook Local Nature Reserve from development. Also, contributions will be

secured towards mitigation measures in accordance with the Essex Coast Recreational disturbance Avoidance and Mitigation Strategy.

5.13 The HRA Screening Report [[See reference 29](#)] considered potential effects of the Garden Community relating to European Sites. The screening report was unable to rule out all potential significant effects relating to:

- impact on features (protected species) outside European Sites (in relation to Stour and Orwell Estuaries SPA and Ramsar site, Colne Estuary SPA and Ramsar site and Abberton Reservoir SPA);
- recreational disturbance (in relation to Stour and Orwell Estuaries SPA and Ramsar site, Colne Estuary SPA and Ramsar site, Hamford Water SPA, SAC and Ramsar site, Essex Estuaries SAC, Blackwater Estuary SPA and Ramsar site and Dengie SPA and Ramsar site);
- and water quantity and quality (in relation to Colne Estuary SPA and Ramsar site).

5.14 This iteration of the plan has been subject to Appropriate Assessment to consider mitigation of the potential significant effects that could not be ruled out. Given that adverse effects relating to these sites could not be ruled out through the HRA work undertaken to date, an element of uncertainty is attached to the effects identified in relation to this SA objective. To limit the potential for adverse effects relating to European sites, it is recommended that the submission DPD reflects the findings of the HRA and subsequent iterations of that report. The uncertainty recorded in relation to this SA objective also reflects the unknown nature of whether compensatory measures will be successful and the difficulties of monitoring the success of these measures in the long term.

5.15 Overall, cumulative uncertain mixed minor positive and minor negative effects (+/-) are expected in relation to this SA objective.

SA Objective 7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

5.16 The DPD has a strong focus on reducing the need to travel through creation of neighbourhoods with high accessibility to local services and facilities – within a 20-minute walk time or with high accessibility by cycling or public transport. Each neighbourhood centre will also contain a range of employment land and houses will be designed to facilitate home working and live-work arrangements. The Plan also has a strong focus on promoting sustainable modes of transport, including walking and cycling connectivity and the creation of a Rapid Transit System particularly via Policies 1: Land Uses and Spatial Approach, 5: Economic Activity and Employment, 6: Community and Social Infrastructure and 7: Movement and Connections. Despite all of these policy measures, the delivery of development of such a large scale at the site will undoubtedly result in an increased number of journeys within and beyond the site as homes and businesses are occupied, and some of these journeys will be by private car.

5.17 Overall, cumulative significant positive effects and minor negative (++/-) are expected for this SA objective.

SA Objective 8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

5.18 The DPD aims to create new centres in the Garden Community each with a range of amenities, facilities and services, including employment opportunities, all accessible by active travel and sustainable transport routes which will promote accessibility to services. This is likely to be achieved through Policies 1: Land Uses and Spatial Approach, 5: Economic Activity and Employment, 6: Community and Social Infrastructure and 7: Movement and Connections. Overall, cumulative significant positive effects (++) are expected for this SA objective.

SA Objective 9: To conserve and enhance historic and cultural heritage and assets and townscape character

5.19 The DPD requires development to follow an appropriate approach to architecture, design, character, development density and public space, to achieve a distinctive sense of place. The approach to development is also required to consider the proximity of heritage assets via particularly Policies 1: Land Uses and Spatial Approach and 2: Requirements for All New Development. In addition, Policy 4: Buildings, Places and Character requires development densities to reflect the heritage value of Wivenhoe Park

Registered Park and Garden. Therefore, the policy requirements in the DPD will require the delivery of new development to maintain and enhance the local historic environment. However, location of Garden Community means there is potential for impacts upon a number of designated heritage assets. The scale of development at the Garden Community has the potential to adversely affect the settings of the local heritage assets and these effects will prove difficult to fully mitigate. It is expected that the requirements of the DPD policies outlined above and Section 1 Local Plan policies SP 7: Place Shaping Principles and SP 9: Tendring/Colchester Borders Garden Community will help limit the magnitude of any effects.

5.20 Overall, cumulative minor negative effects (-?) are expected for this SA objective, with uncertainty relating to how successfully the design and layout mitigate potential negative effects.

SA Objective 10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

5.21 Policy 1: Land Uses and Spatial Approach requires that the development of the Garden Community achieves a minimisation of greenhouse gas emissions through resource efficiency, minimisation of waste, reduction in embodied carbon and the prioritisation of renewable energy. The policy also requires that proposals mitigate and improve resilience to the effects of climate change. Furthermore, Policy 8: Sustainable Infrastructure requires net zero carbon buildings, energy efficient building design and use of materials with low embodied carbon, generation of energy requirements from renewable sources, and a carbon reduction strategy to accompany proposals. As such, cumulative significant positive (++) effects are expected for this SA objective.

SA Objective 11: To improve water quality and address water scarcity and sewerage capacity

5.22 Policy 8: Sustainable Infrastructure sets out that all buildings must include water efficiency measures and seek to achieve water neutrality. Furthermore, water conservation measures such as the re-use of 'greywater' and rainwater 'capture and re-use' should be utilised. However, the scale of new built development proposed by the DPD could pollute water through contaminated surface runoff or from combined sewer overflow during periods of high rainfall. The Stage 2 IWMS report has been commissioned to inform further stages of masterplanning for the site and the SA for the submission plan. Mitigation is provided by DPD policy 3: Nature and Section 1 Local Plan policy SP 9: Tendring/Colchester Borders Garden Community which provide for creation of a network of multi-functional green-blue infrastructure and SuDS which could act as a filtration system. In addition, Policy 9: Infrastructure Delivery and Impact Mitigation requires that proposals for the Garden Community demonstrate that there is sufficient appropriate infrastructure capacity to support the development or that such capacity will be delivered in a timely and, where appropriate, phased manner by the proposal.

5.23 As such, cumulative significant positive (++) effects are expected for this SA objective, with uncertainty relating to the specific measures that will be delivered to protect water quality.

SA Objective 12: To reduce the risk of fluvial, coastal and surface water flooding

5.24 The Garden Community site contains a small number of areas of higher fluvial flood risk (including areas of flood zone 3) along Salary Brook to the west, although Policy 1: Land Use and Spatial Approach provides for two new Country Parks and protection of an area of Ancient Woodland in this watercourse corridor thereby helping to mitigate any flood risk. Additionally, Policy 2: Requirements for All New Development sets out that new development must integrate sustainable drainage systems which could reduce flood risk and build the area's resilience to climate change.

5.25 Mitigation measures set out through Section 1 Local Plan policies SP 7: Place Shaping Principles and SP 9: Tendring/Colchester Borders Garden Community could further reduce any flood risk on site. Overall, cumulative minor positive (+) effects are expected for this SA objective.

SA Objective 13: To improve air quality

5.26 The DPD has a strong focus on reducing the need to travel through creation of neighbourhoods with high accessibility to local services and facilities – within a 20-minute walk time or with high accessibility by cycling or public transport. Each centre will also contain a range of employment land and houses will be designed to facilitate home working and live-work arrangements. For journeys that are required, use of private vehicles will be reduced by the creation of a rapid transit network and promoting sustainable modes of transport, including walking and cycling connectivity, via Policies 1: Land Uses and Spatial Approach and 7: Movement and Connections. Despite all of these policy measures, the delivery of development of such a large scale at the site will undoubtedly result in an increased number of journeys within and beyond

the site as homes and businesses are occupied, and some of these journeys will be by private car. The HRA work undertaken for the DPD [See reference 30] screened out significant adverse effects relating to air quality, however, the potential effects addressed through this work relate only to European sites. Further background reporting to air quality is to be undertaken to support the next iteration of the HRA, the findings of which will also be reflected in the updated version of this SA.

5.27 Overall, cumulative significant positive effects and minor negative (++) are expected for this SA objective.

SA Objective 14: To conserve and enhance the quality of landscapes

5.28 The DPD seeks to deliver a Garden Community that achieves a distinctive sense of place through high quality landscape and public realm design via Policies 1: Land Uses and Spatial Approach, 3: Nature and 6: Community and Social Infrastructure. Policy 2: Requirements for All New Developments also highlights that the development must respect and enhance the local landscape and views. However, the development of this large area of greenfield land, which presently forms part of the countryside to the east of the settlement of Colchester, will undoubtedly result in major change to the local landscape and character. While the scale of development at the Garden Community has the potential to adversely affect the local landscape, the requirements of Policy 1 of the DPD and Section 1 Local Plan policy SP 7: Place Shaping Principles will help mitigate the magnitude of any effects. Overall, cumulative minor positive (+) effects are expected for this SA objective.

SA Objective 15: To safeguard and enhance the quality of soil and mineral deposits

5.29 The majority of the Garden Community site falls within a mineral safeguarding area for sand and gravel, is mostly greenfield land and much of the site comprises land which is of high agricultural value. While Policy 1: Land Uses and Spatial Approach will maintain large areas of the Garden Community as undeveloped, its development would still involve the loss of large areas of greenfield land and higher value agricultural soils to development. Overall, cumulative significant negative (--?) effects are expected for this SA objective, with uncertainty relating to whether it will be possible to extract mineral deposits prior to development.

In-combination effects

5.30 The Tendring Colchester Borders Garden Community will not be delivered in isolation from development proposals covering the surrounding area. The effect of delivering new development will often be transmitted across administrative boundaries. As such it is important to consider the in-combination effects of delivering additional new residential development in Tendring District and Colchester Borough.

5.31 The following larger scale residential developments in the vicinity of the Garden Community site in Tendring District and Colchester Borough have been identified due to the potential effects as a result of delivering these sites in-combination with the Garden Community.

Permissions within the vicinity of the Garden Community

5.32 There are a number of planning permissions for student accommodation within the eastern part of Colchester Town and at the University of Essex campus. The University of Essex is situated to the south of the Garden Community along the A133. A total of 548 student accommodation units are to be built at the University of Essex campus between now and 2025/26. Development at the Colchester Centre includes the redevelopment of the site to provide 114 dwellings to be delivered between 2024 and 2027. The site is situated to the east of the Garden Community towards Colchester Town. A total of 109 dwellings are proposed at Land East of Hythe Quay. The site is situated to the east of the Garden Community towards Colchester Town. The site is expected to be delivered between 2024 to 2026, however it is unclear at this time when development will commence. As such, the three developments could result in a total of 771 dwellings across Colchester Town and the University of Essex campus.

5.33 Given the significant number of dwellings proposed at the University of Essex and in Colchester, there is likely to be increased movement along the A133, increased pedestrian movement within Colchester Town and use of public transport, in particular at Hythe and Colchester Town train stations. This could increase traffic congestion along the A133 and impact on the health and wellbeing of people along the road as well as increase pressure on existing services and facilities. As such, minor negative in-combination effects with regards to SA objectives 3: health, 7: sustainable travel, 8: services and infrastructure and 13: air quality are expected. However, these effects are mitigated by the fact that the Garden Community will provide residents with various services and facilities, an active travel network and a rapid transit route on site, reducing the impact on existing services and facilities. Therefore, the effects are unlikely to be significant.

5.34 A total of 145 dwellings are being constructed at land to the south of Bromley Road, Ardleigh, Colchester. The permitted site is located on the

eastern edge of Colchester, adjacent to the Garden Community. The site is likely to be fully constructed by 2025. As the site is adjacent to the Garden Community it has the benefits of being in close proximity to the employment opportunities, services, facilities and sustainable transport links that will be created within the Garden Community. Therefore, there are likely to be minor positive in-combination effects with the delivery of the Garden Community in relation to SA objectives 2: housing, 3: health, 5: economy and 7: sustainable travel. However, there is potential for minor negative in combination effects in relation to SA objective 6: biodiversity and geological diversity as the site is in close proximity to Salary Brook Local Nature Reserve and as such could increase recreational pressure on the site.

5.35 Elmstead Market is a settlement situated to the east of the Garden Community. Elmstead Market is connected to Colchester by the A133 which passes through the southern portion of the Garden Community. Additionally, as part of the Garden Community development there will be active travel connections to Elmstead Market allowing movement between the Garden Community and Elmstead Market.

5.36 Within Elmstead Market, five sites have planning permission for residential development. The sites are all relatively small but together equate to a total of 293 dwellings with 249 dwellings still to be constructed. These permitted sites are situated in close proximity to the Garden Community on the edges of Elmstead Market. The remaining 249 dwellings to be delivered are expected to be constructed in 2026. The development of the Garden Community and these residential sites at Elmstead Market will reduce the settlement gap between Elmstead Market and Colchester resulting in potential coalescence issues. As Elmstead Market has limited services and facilities, the Garden Community provides an opportunity to increase access to employment opportunities and services and facilities. Additionally, the development of the Garden Community will improve the active travel network which could provide positive effects on the health and wellbeing for the wider community. As such, minor positive in-combination effects for SA objectives 3: health, 5: economy and 7: sustainable travel are expected. However, it is also likely to lead to increased traffic and worsened air quality through the use of the private car especially along the

A133. As such, minor negative in-combination effects are also expected in relation to SA objective 13: air quality.

Local Plan allocations within the vicinity of the Garden Community

5.37 The following site allocations for large scale residential development in the vicinity of the Garden Community have been made through Colchester's adopted Section 2 Local Plan:

- Land west of Hawkins Road, Colchester
- King Edward Quay, Hythe, Colchester
- Scrapyard site, Hythe Quay, Colchester
- Broadfields, Wivenhoe

5.38 Three of the site allocations are located to the south west of the Garden Community within Colchester Town. The Broadfields site is located to the south of the Garden Community in the settlement of Wivenhoe. These larger Local Plan allocations within Colchester equate to a total of 400 dwellings to be delivered between 2027 to 2031. The Broadfields site allocation in Wivenhoe will deliver an additional 120 dwellings between 2027 and 2031. The largest site allocation is at the Scrapyard site, Hythe Quay, Colchester for 200 dwellings. If the Local Plan allocations come forward, they will likely result in minor negative in-combination effects due to the generation of additional traffic, air pollution and pressure on resources, such as water. Additionally, the Local Plan allocation at Broadfields, Wivenhoe could result in increased traffic on the A133 which passes through the southern portion of the Garden Community and provides a connection to the Garden Community. As such, minor negative in-combination effects are expected in relation to SA objectives 3: health, 7: sustainable travel, 11: water resources and quality and 13: air quality.

5.39 There are no site allocations proposed within the Tendring's adopted Section 2 Local Plan that are within close proximity to the Garden Community.

5.40 Overall, although the sites in Colchester and Tendring will likely increase traffic congestion on the existing road network, the Garden Community will also provide the area with additional services and facilities and will improve the active travel network within the area. As such, there are considered to be no significant, additional effects beyond those recorded in the policy assessments and cumulative effects assessment.

Chapter 6

Monitoring

6.1 The SEA Regulations require 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” (Regulation 17), and that the environmental report should provide information on “a description of the measures envisaged concerning monitoring” (Schedule 2).

6.2 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.

6.3 Monitoring should be focused on the significant sustainability effects that may give rise to irreversible damage (with a view to identifying trends before such damage is caused) and on the significant effects where there is uncertainty in the SA and where monitoring would enable preventative or mitigation measures to be taken.

6.4 Because of the early stage of the DPD, monitoring measures have been proposed in this SA Report in relation to all of the SA objectives in the SA framework. As the DPD is progressed further and the likely significant effects are identified with more certainty, it may be appropriate to narrow down the monitoring framework to focus on a smaller number of the SA objectives. This will be addressed in the next iteration of the SA Report.

6.5 The monitoring framework and indicators proposed in SA Report for the Section 1 Local Plan provide the starting point for the monitoring framework for the DPD. Further refinement will likely be necessary as the final DPD is produced, including consideration of any monitoring framework proposed for the DPD itself. The data used for monitoring in many cases will be provided by outside bodies. Information collected by other organisations (e.g. the Environment Agency) can also be used as a source of indicators.

Proposed indicators for monitoring the effects of implementing the Plan

SA 1: To create safe environments which improve quality of life, community cohesion

Proposed monitoring indicators

- All crime – number of crimes per 1000 residents per annum.
- Number of new community facilities granted planning permission.
- Number of new cultural facilities granted planning permission, including places of worship.
- Increase in areas of public open space

SA 2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

Proposed monitoring indicators

- The number of net additional dwellings.
- Affordable housing completions.
- Number of zero-carbon homes completed.
- Number of additional Gypsy and Traveller pitches.
- Number of starter homes completed.
- Number of homes for older people completed.

SA 3: To improve health/reduce health inequalities

Proposed monitoring indicators

- Percentage of new residential development within 30mins of public transport time of a GP or hospital.
- Percentage of new residential development that adheres to Natural England's Accessible Natural Greenspace Standards.
- Percentage of new residential development within walking and cycling distance to schools.
- Percentage of new residential development within walking and cycling distance to sport and recreation facilities.

- Loss/gain of nature/open space/green infrastructure network access (quality and/or extent).
- including formal or informal footpaths.
- Percentage of new residential development within walking and cycling distance to accessible open space.
- Hectares of accessible open space per 1,000 population.

SA 4: To ensure and improve the vitality & viability of centres

Proposed monitoring indicators

- Amount of completed retail, office and leisure development delivered (and in centres).
- Amount of completed retail, office and leisure developments.
- Amount of flexible space created.

SA 5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

Proposed monitoring indicators

- Amount of floor space developed for employment, sqm.
- Number of developments approved associated with sectors identified in the Economic and Employment Study.

- Level 2 qualifications by working age residents.
- Level 4 qualifications and above by working age residents.
- Employment status of residents.
- Average gross weekly earnings.
- Standard Occupational Classification.

SA 6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

Proposed monitoring indicators

- Impacts (direct and indirect) on designated sites.
- Amount of development in designated areas.
- Condition of SSSIs (per Natural England assessments).
- Area of land provided for biodiversity enhancement/ net gain.
- Overall percentage of biodiversity net gain achieved, as calculated by the latest Defra metric.
- Contributions collected as part of the Essex Coast RAMS.

SA 7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

Proposed monitoring indicators

- Percentage of journeys to work by walking and cycling and percentage of journeys to work by public transport.
- Percentage of journeys made by using car clubs.

SA 8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

Proposed monitoring indicators

- Percentage of new development within 20 minutes of community facilities (as defined by each authority).
- Percentage of new residential development within 20 minutes of public transport time of a GP, hospital, primary and secondary school, employment and a major retail centre.
- Additional capacity of local schools / incidents of new school applications.
- Increase in areas of public open space.
- Key infrastructure projects delivered.

SA 9: To conserve and enhance historic and cultural heritage and assets and townscape character

Proposed monitoring indicators

- Number of Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens (and percentage at risk).
- Area of highly sensitive historic landscape characterisation type(s) which have been altered and their character eroded.
- Number of major development projects that enhance or detract from the significance of heritage assets or historic landscape character.
- Percentage of planning applications where archaeological investigations were required prior to approval or mitigation strategies developed or implemented.
- Recorded loss of Listed Buildings by demolition, Scheduled Monuments or nationally important archaeological sites and assets on the Colchester Local List.

SA 10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

Proposed monitoring indicators

- Total CO₂ emissions.
- Renewable energy capacity installed by type.

- Number of zero carbon homes delivered.
- Percentage of household waste recycled and composted.

SA 11: To improve water quality and address water scarcity and sewerage capacity

Proposed monitoring indicators

- Quality of rivers (number achieving ecological good status).
- Number of planning permissions granted contrary to the advice of the Environment Agency.
- Number of SuDS schemes approved.
- Percentage of homes that meet the optional Part G of the Building Regulations.

SA 12: To reduce the risk of fluvial, coastal and surface water flooding

Proposed monitoring indicators

- Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds.
- Number of SuDS schemes approved.

SA 13: To improve air quality

Proposed monitoring indicators

- Number of Air Quality Management Areas.
- Air pollution data (nitrogen dioxide concentrations).

SA 14: To conserve and enhance the quality of landscapes

Proposed monitoring indicators

- Number of proposals permitted contrary to a desire to restrict coalescence.

SA 15: To safeguard and enhance the quality of soil and mineral deposits

Proposed monitoring indicators

- Percentage of new development on best and most versatile (BMV) agricultural land (Grades 1, 2, 3a ALC) and hectares of ALC lost to development.
- Number and area of developments proposed within MSAs.
- Amounts of household, construction and demolition and commercial and industrial waste produced.
- Percentage increase in waste recycled.
- Amount of mineral extracted prior to development.

Chapter 6 Monitoring

- Area of contaminated land brought back into beneficial use.

Chapter 7

Conclusions and Next Steps

7.1 This document has considered the sustainability implications of the policies presented in the Reg 19 DPD for the Tendring Colchester Borders Garden Community. Alongside these, reasonable alternative policy options have been appraised, including spatial options for the Garden Community.

7.2 The broad area of the Garden Community lies to the east of the settlement of Colchester and is presently undeveloped. The illustrative masterplan currently allows for separation between Colchester and the villages of Elmstead Market and Wivenhoe. Regardless of the contribution it makes in terms of preventing coalescence between nearby settlements, the site has landscape value in its own right, having been assessed as having high to moderate landscape value. There are also a number of listed buildings towards Crockleford Heath and Grade II Listed Allen's Farmhouse within the site boundaries and Wivenhoe Registered Park lies in close proximity to the site boundary to the south west. The site also contains several areas of ancient woodland, Salary Brook Local Nature Reserve and a number of Local Wildlife Sites to the west. Furthermore, much of the soil within the site comprises grade 1 agricultural land (excellent quality) with areas of grade 2 (very good) and 3 (good to moderate) interspersed, demonstrating its value for agricultural use.

7.3 The purpose of the DPD is to guide the development of the Garden Community at the site for the next 30 to 40 years. The DPD is drafted along five key vision themes. In line with these themes, the Garden Community is to support the maintenance of the outdoor natural environment, incorporating green-blue infrastructure to benefit its residents and wildlife. The site will be developed to reduce the need to travel and support a large proportion of journeys to be made by sustainable modes, with community spaces and other social infrastructure to meet local needs, incorporated from its outset. Development at the site will meet the needs of all sections of the community and the design and architecture of development will complement the

surrounding landscape. The design and layout of the Garden Community is also intended to limit its contribution to climate change.

7.4 The significant quantum of new homes provided by the DPD will contribute to the housing need for Colchester Borough and Tendring District. The layout of the site would provide residents with good access to services and facilities and jobs across three new 'neighbourhoods' and their distinct but interconnected centres as well as to the new employment land delivered at the north east and south of the site. There is also potential for increased linkages between the site and the university campus to the south, which could foster economic growth and the potential for residents to make use of the further learning facilities at this location. The green links incorporated at the site and rapid transit network are likely to support a significant proportion of residents making use of more sustainable transport options. This is particularly the case given that the development is designed to provide access to essential services and facilities within a 20-minute walk or with high accessibility by cycling or public transport.

7.5 However, the development set out in the DPD also has the potential for adverse impacts, principally in relation to environmental quality. The level of development provided could result in detrimental impacts on local habitats and biodiversity sites. There is also potential for harm to local landscape character, the settings of surrounding settlements and to heritage assets. Furthermore, regardless of the potential for a high level of uptake of sustainable modes of transport, the development of a large number of new homes and the occupation of new businesses supported through the DPD has the potential to result in negative effects in terms of traffic congestion, climate change and air quality.

7.6 The DPD includes an overarching approach to land uses and spatial layout of development at the site as well as a number of topic based policies. It is expected that these policies will help to mitigate the potential for many of the adverse effects described above. These include a requirement for development to be delivered in line with the Strategic Masterplan for the site which will limit development within the strategic green gap and the Crockleford Heath Area of Special Character, thereby helping to preserve local character, the separation of local settlements and the setting of heritage assets within and close to the site.

The DPD policies also allocate much of the west of the site as a new country park, which will limit harm to Salary Brook SSSI and the woodland and other associated habitats towards this part of the site. A second country park to the south of the A133 connecting with Wivenhoe Nature Park will also be allocated which links to existing woodland and responds sensitively to the Wivenhoe Registered Park and Garden. These measures will be supported by provision of a comprehensive network of green-blue infrastructure that will link to surrounding areas, as well as providing biodiversity net gain. Of particular importance is the requirement for the site to incorporate supporting infrastructure from the beginning, helping to ensure that sustainable habits in relation to travel, recycling and so on are established from the outset. The potential for reducing travel by car at the site will be further supported by the DPD's requirement that net zero carbon transport is achieved by 2050. The plan also requires that new buildings be net zero carbon.

7.7 In considering the total effects of all of the DPD's policies, the SA found that the DPD is likely to have significant positive effects in relation to SA objective 1: safety and community cohesion, SA objective 2: housing, SA objective 3: health, SA objective 4: vitality and viability of centres, SA objective 5: economy, SA objective 7: sustainable travel, SA objective 8: services and infrastructure, SA objective 10: energy efficiency and climate change, SA objective 11: water resources and quality and SA objective 13: air quality. Overall significant negative effects from the DPD were identified for SA objective 15: soils and mineral resources. The negative effect identified in relation to SA objective 15 is uncertain dependent on whether it is possible to extract mineral deposits prior to development.

7.8 In summary, the DPD seeks to accommodate large scale growth to meet the local housing need in a manner that will support good access to services and facilities. It will also help achieve a high level of sustainability in terms of building standards, promotion of sustainable travel and incorporation of greenspace to promote benefits relating to biodiversity as well as local character and resident's health and wellbeing. The development will face challenges, most notably with regards to impacts on the local environment in terms of landscape, wildlife and historic value. Adverse effects relating to loss of higher value soils are likely to prove particularly difficult to avoid given the

location of the site and the requirement for land take for development and infrastructure provision. Nevertheless, once the policy safeguards in the DPD are taken into account, the magnitude of such negative effects is likely to be reduced. Taken as a whole, therefore, the DPD sets out a positive plan for the achievement of the Garden Community. The policies of the plan set a high standard which development will be required to meet, and it is considered consistent with the principles of sustainable development.

Next steps

7.9 As noted above, the findings of the Integrated Water Management Strategy (IWMS) Stage and HRA Appropriate Assessment are not yet included within this SA report. Once their findings are finalised, an updated version of this SA report will be produced to accompany consultation on the Reg 19 DPD. Consultation is currently expected to commence in June 2023.

LUC

February 2023

Appendix A

Consultation Comments on the SA

Consultation responses to the 2021 SA Scoping letter

A.1 The decision was made to use the SA framework from the SA of the Section 1 Local Plan to undertake the appraisal work for the DPD, after reviewing the supporting appraisal questions (the SA assessment criteria) to ensure that they were appropriate for appraisal of the DPD and reasonable alternatives. Consultation on this decision was undertaken in October 2021 via a focussed Scoping letter sent to the three statutory consultees – Natural England, Historic England and the Environment Agency.

A.2 The consultation responses to the October 2021 focussed Scoping letter are summarised below, along with notes on how the responses have been taken into account in the SA process.

Natural England response

A.3 “Natural England agree that that the approach taken to the SA needs to be transparent and consistent, ensuring that the appraisal questions are appropriate to the scope and level of detail required. However, until such a time as draft questions are proposed and available to view, we cannot comment further on the scope or level of detail, therefore, we do not have any detailed comments to make at this stage...once the SA regulation 18 draft report has been produced, Natural England would welcome the opportunity to comment further on the appraisal questions in conjunction with reviewing the updated

Appendix A Consultation Comments on the SA

information on the environmental baseline and key sustainability issues in the updated SA scoping report.”

- LUC response: the amended supporting appraisal questions were included in the SA Report of the Draft DPD at Regulation 18 stage and consultees were invited to comment on these as well as on the appraisal findings for the draft DPD.

A.4 In “earlier correspondence on 22nd January 2018 (ref: 231956c) where we made some recommendations for the draft SA monitoring indicators. We suggest that it may be useful to review these comments and consider whether the advice given on indicators may be applicable to the SA currently under development”.

- LUC response: regard was had to earlier advice on monitoring indicators in proposing the indicators set out in **5.40**.

Historic England response

A.5 “While we support the overall approach set out in your letter dated 19th October 2021, it is difficult to comment any further without seeing the revised appraisal questions which I understand LUC will produce in due course. We therefore look forward to receiving subsequent consultations on this matter in due course.”

- LUC response: the amended supporting appraisal questions were included in the SA Report of the Draft DPD at Regulation 18 stage and consultees were invited to comment on these as well as on the appraisal findings for the draft DPD.

Environment Agency response

A.6 No response was received from the Environment Agency.

Consultation responses on the 2021 SA Report for the Draft DPD

Wivenhoe Town Council

A.7 States that the SA makes a convincing argument that there shouldn't be any development south of the A133, as it would not be sustainable. Highlights the following text from the SA: "Of the four options considered for the spatial layout of the Garden Community, the preferred option (option 3) on which Policy 1 is based was found to perform more sustainably than the three alternatives. This reflects the higher proportion of the site that would remain undeveloped, with increased benefits in terms of preserving local landscape character, the setting of nearby settlements and heritage assets and greenspace for habitat provision and connectivity. This approach was also found to perform more favourably in terms of limiting the need to travel by car, given the higher density and more compact form of development that would result. This approach is considered mostly likely to provide residents with easy access to a range of services and facilities within the Garden Community at the new centres. Option 3 would also limit the potential for a portion of residents to be located to the south of the A133 (as would result through options 1 and 2) where they would experience a degree of severance from the rest of the Garden Community. While option 3a would also provide some new development to the south of the A133, this land would allow for the expansion of the university. Therefore, the issue of severance resulting from the A133 is less of an issue through this option given the level of integration that would be achieved with the existing university area and services and facilities at this location."

- LUC response: Comment noted.

Natural England

A.8 States that the quantum of space allocated to the country park and incorporation of areas of green infrastructure differ significantly between the masterplan and Key Diagrams. It appears as though the Sustainability Appraisal is based upon the options shown in the Key Diagrams.

- LUC response: The appraisal of the four spatial distribution options in the SA of the Draft DPD was based on the level of detail presented in the Masterplan Design Options Report. The appraisal of Policy 1 was based on the Council's preferred approach for the spatial layout of the site, as described in the policy text and accompanying key diagram, while also considering the mitigation that might be achieved through the requirements of the policy. The spatial layout described by Policy 1 represents an evolution of the preferred approach, option 3, approach A: maximum landscape, as presented in the Masterplan Design Options Report. Further to this, it should be noted that the Strategic Framework Masterplan Report provides further detail than the Key Diagram because it shows all of the greenspace on site compared to the Key Diagram which acts as a policies map.

A.9 States that the potential cumulative impacts of the Bellway Homes committed development in conjunction with the preferred options should be considered within the SA.

- LUC response: The cumulative effects presented in the SA of the Reg 19 DPD now consider the potential for combined effects with developments in the surrounding area. This includes the potential for the development at the Bellway Homes site to have cumulative effects with those of the DPD.

A.10 Notes the potential confusion with the naming of the options appraised in the SA – “Option 3a’ appears to correspond to ‘Option 3, Approach B’ key diagram, rather than the ‘Approach A’ key diagram. Assuming this is correct, for clarity, the SA should in future revisions refer to Option 3 as 'Option 3, Approach A' and to Option 3a as 'Option 3, Approach B' to make it clear which Key Diagram each of the options assessed within the SA is based on.”

Appendix A Consultation Comments on the SA

- LUC response: To better align with the text in the DPD document and to avoid confusion, the SA Report for the Reg 19 DPD now refers to Option 3 as 'Option 3, Approach A' and to Option 3a (as presented in the SA Report for the Draft DPD) as 'Option 3, Approach B'.

A.11 States that in relation to the findings for SA Objective 6: biodiversity an overall, cumulative uncertain mixed minor positive and minor negative effects have been recorded and provides an overview of the HRA findings. The HRA has been unable to rule out all potential significant effects.

A.12 States that in relation to the findings for SA objective 11: water a significant positive effect has been recorded overall. However, it should be noted that the HRA cannot at this stage rule out likely significant effects arising from changes in water quality to Colne Estuary SPA and Ramsar, and therefore Appropriate Assessment is required to understand the potential for changes in water quality arising from waste water. It is a Local Plan policy requirement (SP9 paragraph F.17) that provision of improvements to waste water treatment including an upgrade to the Colchester Waste Water Treatment Plan and offsite drainage improvements aligned with the phasing of the development will be necessary. Our understanding is that a Stage 2 Integrated Water Management Strategy is being prepared to provide evidence to support the DPD and HRA and to ensure additional capacity is available ahead of occupation of dwellings. The SA will require updating to take into account the findings of the HRA Appropriate Assessment with regards to water quality and the Integrated Water Management Strategy.

A.13 States that in relation to the findings for SA objective 13: air quality a significant positive effect has been recorded overall. However, with regards to maintaining air quality at sensitive, designated ecological receptor sites it is stated that the HRA Screening report was unable to rule out likely significant effects arising from cumulative impacts for air quality. The SA will require updating to take into account the findings of the HRA Appropriate Assessment with regards to air quality.

- LUC response: The SA of the DPD at Reg 19 stage will reflect the findings of the Appropriate Assessment, once received. The findings will be used to

Appendix A Consultation Comments on the SA

inform the assessment relating to SA objectives 6, 11 and 13. However, given that the findings for SA objectives 11 and 13 are concerned with water and air quality beyond simply issues of biodiversity, the findings of the AA (which focus only on the potential impacts on European biodiversity designations) form only part of the assessments relevant to these SA objectives. The findings of the Integrated Water Management Strategy have also informed the effects recorded in relation to SA objective 11.

A.14 States that overall, the SA found significant negative effects from the DPD were identified for SA objective 15: soils and mineral resources. The negative effect identified in relation to SA objective 15 is uncertain dependent on whether it is possible to extract mineral deposits prior to development. Since the majority of the Garden Community site falls on greenfield land and much of the site comprises land which is of high agricultural value, it is inevitable that there will be some degree of BMV loss. It is clear that Option 3, Approach A will result in the least loss of BMV.

- Comment noted. In relation to the appraisal of the DPD in relation to SA objective 15: soils and mineral resources, the findings are unchanged as there is still uncertainty around safeguarding minerals prior to development and that a high level of greenfield land will be lost to development and this will include some higher value soils.

Martine Ward

A.15 States that SA Appraisal is a legal requirement of the planning system which has helped the Councils to ensure that the social, economic and environmental impacts of the policies it has chosen have been identified and properly considered. However, queries how the process benefits existing residents.

- LUC response: Residents have been given the opportunity to influence the outputs of the SA as part of the consultation process held on the Draft DPD. All representations received on the SA have been summarised, with responses to these representations provided. Where appropriate updates

to the SA approach and findings have been reflected in this iteration of the SA. Furthermore, by identifying the likely sustainability effects of the various plan options under consideration by the Councils, the SA has helped to identify opportunities to avoid or reduce negative effects and improve positive effects on existing residents.

East Suffolk & North Essex NHS Foundation Trust

A.16 Suggests a number of minor changes to the appraisal questions included as part of the SA framework. These are:

- Updating the appraisal questions for SA objective 3 to include - will it ensure access to and prevent overburdening of health facilities, including primary, acute and emergency services, including through the provision of new on and off-site infrastructure of this type?
- Updating the appraisal questions for SA objective 8 to include - Will it ensure access to and necessary increases in capacity to acute healthcare services?

A.17 LUC response: The suggested changes to the appraisal questions for SA objectives 3 and 8 have been incorporated in the SA framework, as reported in this SA Report.

A.18 Suggests that additional indicators should be included in the SA monitoring framework. These are the availability of bed spaces at hospitals and the length of waiting time for patient appointments.

- LUC response: The SA framework has included indicators that are reasonable for the Councils to monitor.

A.19 States that the SA should consult with the appropriate health authorities to include suitable healthcare activity baseline evidence and indicators.

Appendix A Consultation Comments on the SA

- LUC response: The updated baseline for the SA Report is presented in Appendix C of this report. Further to this, stakeholders have been given the opportunity to provide representations on the SA at various points throughout the plan making process.

A.20 Requests that the SA refers to the provision of a potential health care hub, which may provide for a range of health care services within the Garden Community as part of the range of on-site community facilities to be provided.

- The appraisal work in this iteration of the SA (and all previous iterations of the SA) reflects the detail that has been supplied by the Councils in relation to healthcare facilities, such as a new Health Centre, that are expected to be provided at the new Garden Community.

Latimer (Tendring Colchester Borders Garden Community) Developments Limited

A.21 States that the SA has not assessed the option that Latimer is suggesting as a 'reasonable alternative'.

- LUC response: In response to this representation on the SA of the Draft DPD at Regulation 18 stage, an assessment of the alternative that Latimer is promoting for the distribution of development at the Garden Community has been included within Chapter 4 of the SA Report at the Pre-submission Regulation 19 stage.

A.22 Considers that SA objective 2 may be deficiently defined. This is because the SA fails to identify that the real housing goal of the Section 1 Plan is to deliver between 7,000 and 9,000 units at the Garden Community. Paragraph 4.32 of the SA for the Draft DPD refers to 8,000 units, but this is not clearly tied to Objective 2 and is so generalised that all four options appear to score '++' in the assessment, which given the differing extent of developable area cannot be correct. The strength of the capacity work undertaken is questioned – the SA assumes that all four options would achieve 8,000 units.

Appendix A Consultation Comments on the SA

- LUC response: The SA has been informed by the masterplanning work undertaken as part of the evidence base for the preparation of the DPD. As part of this work, assumptions have been made about the number of houses each of the reasonable alternative options (for the distribution of development) are expected to be able to accommodate, these are set out in the masterplan design options document (2022).

Appendix B

Review of Relevant International Plans, Policies and Programmes

Relevant International Plans, Policies and Programmes

European Commission (EC) (2011) A Resource-Efficient Europe – Flagship Initiative Under the Europe 2020 Strategy, Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee of the Regions

Purpose / main aims and objectives

B.1 The policy aims to enjoy the benefits of a resource-efficient and low-carbon economy, through achieving three conditions:

- First, to take coordinated action in a wide range of policy areas and this action needs political visibility and support.
- Second, act urgently due to long investment lead-times. While some actions will have a positive impact on growth and jobs in the short-term,

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others require an upfront investment and have long pay-back times but will bring real economic benefits for the EU economy for decades to come.

- Third, to empower consumers to move to resource-efficient consumption, to drive continuous innovation and ensure that efficiency gains are not lost.

Relevance to Local Plans / SA

B.2 The Plan should take regard of these principles in order contribute to the aspirations outlined by the EU.

European Landscape Convention (Florence, 2002)

Purpose / main aims and objectives

B.3 The convention promotes landscape protection, management and planning.

Relevance to Local Plans / SA

B.4 The Plan should adhere to landscape issues. The SA also includes criteria to protect the archaeological heritage.

European Union Water Framework Directive 2000

Purpose / main aims and objectives

B.5 The framework amalgamates multiple directives into one to provide the operational tool for water treatment, setting the objectives for water protection for the future. Directives included in the framework are:

- The Urban Waste Water Treatment Directive, providing for secondary (biological) waste water treatment, and even more stringent treatment where necessary.
- The Nitrates Directive, addressing water pollution by nitrates from agriculture.
- A new Drinking Water Directive, reviewing the quality standards and, where necessary, tightening them (adopted November 1998).
- A Directive for Integrated Pollution and Prevention Control (IPPC), adopted in 1996, addressing pollution from large industrial installations.

Relevance to Local Plans / SA

B.6 Treatment and recycling water in this way is a necessity for developments over a population threshold to adhere to the EU directive. The Plan should have regard to waste water provisions and considerations.

European Union Nitrates Directive 1991

Purpose / main aims and objectives

B.7 The Nitrates Directive (1991) aims to protect water quality across Europe by preventing nitrates from agricultural sources polluting ground and surface waters and by promoting the use of good farming practices.

Relevance to Local Plans / SA

B.8 The Plan should have regard to waste water provision implications and considerations.

European Union Noise Directive 2002

Purpose / main aims and objectives

B.9 The aim of this Directive shall be to define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise. To that end the following actions shall be implemented progressively:

- The determination of exposure to environmental noise, through noise mapping, by methods of assessment common to the Member States;
- Ensuring that information on environmental noise and its effects is made available to the public;
- Adoption of action plans by the Member States, based upon noise-mapping results, with a view to preventing and reducing environmental noise where necessary and particularly where exposure levels can induce

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harmful effects on human health and to preserving environmental noise quality where it is good.

B.10 This Directive shall also aim at providing a basis for developing Community measures to reduce noise emitted by the major sources, in particular road and rail vehicles and infrastructure, aircraft, outdoor and industrial equipment and mobile machinery.

Relevance to Local Plans / SA

B.11 The Plan should regard this strategy to noise pollution when permitting developments across the district.

B.12 Considerations should be made in the Plan for the proximity of developments to significant sources of noise pollution and any mitigating measures which could be employed to minimise the impact on the local population.

European Union Floods Directive 2007

Purpose / main aims and objectives

B.13 The purpose of this Directive is to establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community.

Relevance to Local Plans / SA

B.14 Flood risk considerations in the Plan should be informed by the approach within the EU Floods Directive.

European Union Air Quality Directive 2008 including previous versions

Purpose / main aims and objectives

B.15 Council Directive 96/62/EC on ambient air quality assessment and management.

B.16 Directive 1999/30/EC relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air.

B.17 Directive 2000/69/EC of the European Parliament and of the Council relating to limit values for benzene and carbon monoxide in ambient air.

B.18 Directive 2002/3/EC of the European Parliament and of the Council relating to ozone in ambient air.

B.19 This new Directive includes the following key elements:

- That most of existing legislation be merged into a single directive (except for the fourth daughter directive) with no change to existing air quality objectives (Framework Directive 96/62/EC, 1-3 daughter Directives 1999/30/EC, 2000/69/EC, 2002/3/EC, and Decision on Exchange of Information 97/101/EC.).

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- New air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives – exposure concentration obligation and exposure reduction target.
- The possibility to discount natural sources of pollution when assessing compliance against limit values.
- Possibility for time extensions of three years (PM10) or up to five years (NO2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission.

Relevance to Local Plans / SA

B.20 Air quality management principles relating to the range of pollutant gases outlined within the EU Air Quality Directive are a consideration for the Plan and the SA.

European Union Directive on the Conservation of Wild Birds 2009

Purpose / main aims and objectives

B.21 This Directive relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States to which the Treaty applies. It covers the protection, management and control of these species and lays down rules for their exploitation.

B.22 It shall apply to birds, their eggs, nests and habitats.

Relevance to Local Plans / SA

B.23 Conservation of bird species must be incorporated in ecological considerations when assessing the suitability of a development. The Plan should have regard to potential impacts on bird habitats.

European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992

Purpose / main aims and objectives

B.24 The aim of this Directive shall be to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies.

Relevance to Local Plans / SA

B.25 The Plan should seek to ensure the conservation of habitats supporting ecological variance. This directive can inform approaches to the protection of ecologically significant sites.

European Community Biodiversity Strategy to 2020

Purpose / main aims and objectives

B.26 This strategy aims to conserve biodiversity within Europe in an attempt to achieve the following target and vision:

2020 headline target

B.27 Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.

2050 vision

B.28 By 2050, European Union biodiversity and the ecosystem services it provides — its natural capital — are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human wellbeing and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided.

Relevance to Local Plans / SA

B.29 The Plan and SA should have regard to the impact of developments on the environment and biodiversity and include this consideration as a factor when evaluating the suitability of a site for development.

United Nations Paris Climate Change Agreement (2015)

Purpose / main aims and objectives

B.30 This is an international agreement to keep global temperature rises this century well below 2 degrees Celsius above pre-industrial levels.

Relevance to Local Plans / SA

B.31 The Plan should attempt to create a new community that adheres to a reduction in greenhouse gas emissions to aid in keeping the global temperature down.

United Nations Kyoto Protocol

Purpose / main aims and objectives

B.32 This protocol aims to Implement and/or further elaborate policies and measures for member states in accordance with its national circumstances, such as:

- Enhancement of energy efficiency in relevant sectors of the national economy;
- Protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, afforestation and reforestation;

Appendix B Review of Relevant International Plans, Policies and Programmes

- Promotion of sustainable forms of agriculture in light of climate change considerations;
- Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies;
- Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments;
- Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol;
- Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector; and
- Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy.

Relevance to Local Plans / SA

B.33 The Plan should attempt to create a new community that adheres to the low carbon and low emissions ethos that is within the Kyoto Protocol. Any development that utilises new technologies, techniques or materials should be explored in the Plan where possible and appropriate.

World Commission on Environment and Development 'Our Common Future' 1987

Purpose / main aims and objectives

B.34 This report aims were:

- To propose long-term environmental strategies for achieving sustainable development by the year 2000 and beyond; to recommend ways concern for the environment may be translated into greater co- operation among developing countries and between countries at different stages of economic and social development and lead to the achievement of common and mutually supportive objectives that take account of the interrelationships between people, resources, environment, and development;
- To consider ways and means by which the international community can deal more effectively with environment concerns; and
- To help define shared perceptions of long- term environmental issues and the appropriate efforts needed to deal successfully with the problems of protecting and enhancing the environment, a long term agenda for action during the coming decades, and aspirational goals for the world community.

Relevance to Local Plans / SA

B.35 The Plan should contribute to the co-operative effort to reduce the environmental impacts of development through policy to promote more efficient and carbon neutral techniques and materials in design and construction.

The World Summit on Sustainable Development Johannesburg Summit 2002

Purpose / main aims and objectives

B.36 The Summit sought to address social, environmental and economic with particular focus on the issues facing some of the most deprived people across the world. It aimed to:

- Halve the proportion of the world's population that lives on less than \$1 a day;
- Halve the number of people living without safe drinking water or basic sanitation; and
- Reduce mortality rates for infants and children under five by two thirds, and maternal mortality by three quarters.

B.37 Other provisions address a comprehensive range of environmental and development issues, such as climate change, energy, agriculture, trade, African development, and small island States. The Implementation Plan calls for a substantial increase in use of renewable sources of energy “with a sense of urgency”. Although it sets no specific targets; implementation of a new global system for classification and labelling of chemicals was discussed in an attempt to restore depleted fish stocks.

Relevance to Local Plans / SA

B.38 Issues surrounding climate change and renewable energy have significant implications for development. The Plan should strive to create a community of low carbon development and reduce environmental degradation through responsible design and construction practices.

Environmental Assessment of Plans and Programmes Regulations (SEA Regulations)

Purpose / main aims and objectives

B.39 These regulations transpose the requirements of the SEA Directive (2001/42/EC) into national law.

B.40 The SEA Directive sets out the requirement for an environmental assessment to be undertaken when preparing certain plans and programmes and also details which types of plans and programmes are likely to be subject to SEA.

B.41 The regulations also set out procedures for preparing the environmental report and consultation.

Relevance to Local Plans / SA

B.42 The regulations to which this SA must adhere to be legally compliant and pass the test of soundness at the submission stage.

Review of the European Sustainable Development Strategy, European Commission, 2009

Purpose / main aims and objectives

B.43 The European Council in December 2009 confirmed that “Sustainable development remains a fundamental objective of the European Union under the Lisbon Treaty. As emphasised in the Presidency’s report on the 2009 review of the Union’s Sustainable Development Strategy, the strategy will continue to provide a long term vision and constitute the overarching policy framework for all Union policies and strategies. A number of unsustainable trends require urgent action.

B.44 Significant additional efforts are needed to:

- Curb and adapt to climate change;
- To decrease high energy consumption in the transport sector; and
- To reverse the current loss of biodiversity and natural resources.

Relevance to Local Plans / SA

B.45 The Plan should take account of this Directive as well as more detailed policies derived from the Directive at the national level.

B.46 The Strategy also informs the SA in the development of relevant objectives and criteria regarding climate change, energy and biodiversity.

Environment 2010: Our Future, Our Choice (2003)

Purpose / main aims and objectives

B.47 Tackling Climate Change objectives:

- In the short to medium term we aim to reduce greenhouse gas emissions by 8% compared with 1990 levels by 2008-12 (as agreed at Kyoto);
- In the longer term we need to reduce global emissions even further by approximately 20-40% on 1990 levels by 2020;
- For the first time the Programme recognises the need to tackle the long term goal of a 70% reduction in emissions set by the Intergovernmental Panel on Climate Change;
- Protecting Nature and Wildlife objectives;
- Protect our most valuable habitats through extending the Community's Natura 2000 programme;
- Put in place action plans to protect biodiversity;
- Develop a strategy to protect the marine environment;
- Extend national and regional programmes to further promote sustainable forest management;
- Introduce measures to protect and restore landscapes;
- Develop a strategy for soil protection; and
- Co-ordinate Member States' efforts in handling accidents and natural disasters.

Relevance to Local Plans / SA

B.48 The Plan should take account of this Directive as well as more detailed policies derived from the Directive at the national level.

B.49 The Strategy also informs the SA in the development of relevant objectives and criteria regarding climate change, energy and biodiversity.

SEA Directive 2001

Purpose / main aims and objectives

B.50 The SEA Directive sets out the requirement for an environmental assessment to be undertaken when preparing certain plans and programmes and also details which types of plans and programmes are likely to be subject to SEA.

Relevance to Local Plans / SA

B.51 The Plan is subject to SEA. These regulations will help inform the content of the environmental report. By assessing impacts of any developments on the locality and investigating alternative approaches and sites, the development can meet local needs while also positively impacting on the economy, society and environment where possible.

The Industrial Emissions Directive 2010 Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)

Purpose / main aims and objectives

B.52 Lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.

B.53 The Directive sets emission limit values for substances that are harmful to air or water.

Relevance to Local Plans / SA

B.54 The Plan should take account of this Directive as well as more detailed guidance derived from the Directive contained in the NPPF.

Energy Performance of Buildings Directive 2010 on the energy performance of buildings 2010/31/EU

Purpose / main aims and objectives

B.55 The Directive aims to promote the energy performance of buildings and building units.

B.56 It requests that member states adopt either national or regional methodology for calculating energy performance and minimum requirements for energy performance.

Relevance to Local Plans / SA

B.57 The Plan should ensure that energy efficiency measures are sought where relevant. The Directive also informs the SA of such issues and realistic measures.

The Drinking Water Directive 1998 Directive 98/83/EC on the quality of water intended for human consumption

Purpose / main aims and objectives

B.58 Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.

B.59 Member States must set values for water intended for human consumption.

Relevance to Local Plans / SA

B.60 The Plan should take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.

EU Seventh Environmental Action Plan (2002-2012)

Purpose / main aims and objectives

B.61 The EU's objectives in implementing the programme are:

- To protect, conserve and enhance the Union's natural capital;

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- To turn the Union into a resource-efficient, green and competitive low-carbon economy;
- To safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing;
- To maximise the benefits of the Union's environment legislation;
- To improve the evidence base for environment policy;
- To secure investment for environment and climate policy and get the prices right;
- To improve environmental integration and policy coherence;
- To enhance the sustainability of the Union's cities; and
- To increase the Union's effectiveness in confronting regional and global environmental challenges.

Relevance to Local Plans / SA

B.62 The Plan should take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.

European Spatial Development Perspective (1999)

Purpose / main aims and objectives

B.63 Economic and social cohesion across the community. Conservation of natural resources and cultural heritage. Balanced competitiveness between different tiers of government.

Relevance to Local Plans / SA

B.64 The Plan should take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.

European Convention on the Protection of the Archaeological Heritage (Valletta, 1992) Revision of the 1985 Granada Convention

Purpose / main aims and objectives

B.65 Protection of the archaeological heritage, including any physical evidence of the human past that can be investigated archaeologically both on land and underwater.

B.66 Creation of archaeological reserves and conservation of excavated sites.

Relevance to Local Plans / SA

B.67 The Plan should ensure development principles that take account of the protection of archaeological heritage.

Aarhus Convention (1998)

Purpose / main aims and objectives

B.68 Established a number of rights of the public with regard to the environment. Local authorities should provide for:

- The right of everyone to receive environmental information.
- The right to participate from an early stage in environmental decision making.
- The right to challenge in a court of law public decisions that have been made without respecting the two rights above or environmental law in general.

Relevance to Local Plans / SA

B.69 The Plan should take account of the Convention.

B.70 The Convention also ensures that the public are involved and consulted at all relevant stages of SA production.

National plans and programmes (beyond the NPPF) of most relevance for the Local Plan

Climate change adaptation and mitigation

B.71 The Climate Change Act 2008 (update) sets targets for UK greenhouse gas emission reductions of 100% by 2050 and CO₂ emission reductions of at least 26% by 2015, against a 1990 baseline.

B.72 Defra, The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting: Making the country resilient to a changing climate (2018) – sets out the strategy for adapting both to the climate change that is already evident, and that which we might see in the future.

B.73 Met Office, State of the UK Climate (2019) – the sixth in the annual series of reports that provide a summary of the UK weather and climate through the calendar year 2019, alongside the historical context for a number of essential climate variables. It provides an accessible, authoritative and up-to-date assessment of UK climate trends, variations and extremes based on the most up to date observational datasets of climate quality.

B.74 Department for Transport, Decarbonising Transport: Setting the Challenge (2020) – sets out the strategic priorities for a new Transport Decarbonisation Plan (TDP), to be published later in 2020, will set out in detail what government, business and society will need to do to deliver the significant emissions reduction needed across all modes of transport, putting us on a pathway to achieving carbon budgets and net zero emissions across every single mode of transport by 2050. This document acknowledges that while there have been recently published strategies to reduce greenhouse gas emissions in individual transport modes, transport as a whole sector needs to go further and more quickly, therefore the TDP will take a coordinated, cross-modal approach to deliver the transport sector's contribution to both carbon budgets and net zero.

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B.75 Environment Agency, National Flood and Coastal Erosion Risk Management Strategy for England (2020) – sets out the national framework for managing the risk of flooding and coastal erosion. It provides a framework for guiding the operational activities and decision making of practitioners supporting the direction set by government policy.

B.76 HM Government, The Energy Performance of Buildings Regulations (2021) – seek to improve the energy efficiency of buildings, reducing their carbon emissions and lessening the impact of climate change. The Regulations require the adoption of a standard methodology for calculating energy performance and minimum requirements for energy performance, reported through Energy Performance Certificates and Display Energy Certificates

B.77 HM Government, The Waste (Circular Economy) Regulations (2020) – seek to prevent waste generation and to monitor and assess the implementation of measures included in waste prevention programmes. They set out requirements to justify not separating waste streams close to source for re-use, recycling or other recovery operations, prohibit incineration and landfilling of waste unless such treatment process represent the best environmental outcome in accordance with the waste hierarchy. The Regulations set out when waste management plans and in waste prevention programmes are required. The Regulations focus on the circular economy as a means for businesses to maximise the value of waste and waste treatment.

B.78 HM Government, Our Waste, Our Resources: A strategy for England (2018) aims to increase resource productivity and eliminate avoidable waste by 2050. The Strategy sets out key targets which include: a 50% recycling rate for household waste by 2020, a 75% recycling rate for packaging by 2030, 65% recycling rate for municipal solid waste by 2035 and municipal waste to landfill 10% or less by 2035.

B.79 Ministry of Housing, Communities and Local Government, National Planning Policy for Waste (NPPW) (2014) – sets out a number of key planning objectives. It requires that local planning authorities help deliver sustainable development through measures including driving waste management up the

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waste hierarchy; ensuring that waste management is considered alongside other spatial planning concerns; and providing a framework in which communities can take more responsibility for their own waste.

B.80 Defra, Waste Management Plan for England (2013) – sets out the measures for England to work towards a zero waste economy.

B.81 HM Government, The Clean Growth Strategy (2017) – 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.

B.82 Department for Business, Energy & Industrial Strategy, The Net Zero Strategy: Build Back Greener (2021) sets out policies and proposals for decarbonising all sectors of the UK economy to meet net zero targets by 2050. It sets out strategies to keep the UK on track with carbon budgets, outlines the National Determined Contribution (NDC) and sets out the vision for a decarbonised economy in 2050. Its focus includes:

- Policies and proposals for reducing emissions across the economy in key sectors (power, fuel supply and hydrogen, industry, heat and buildings, transport, natural gas and waste); and
- Policies and proposals for supporting transition across the economy through innovation, green investment, green jobs, embedding net-zero in government, local climate action, empowering people and businesses, and international leadership and collaboration.

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B.83 HM Government, The UK Hydrogen Strategy (2021) sets out the Government's approach to developing a thriving low carbon hydrogen sector in the UK, with the ambition for 5GW of capacity by 2030. The Strategy outlines the role of hydrogen in meeting net zero targets, the existing opportunity within the UK, a strategic framework, a roadmap for the economy, and the UK Government's commitments for a hydrogen economy.

B.84 The Industrial Decarbonisation Strategy (2021) aims to support existing industry to decarbonise and encourage the growth of new, low carbon industries to protect and create skilled jobs and businesses in the UK encouraging long-term investment in home-grown decarbonisation technology. The strategy builds in the Prime Minister's 10 Point Plan for a Green Industrial Revolution and sets out the government's vision for the manufacturing and construction sector and is part of the government's path to net zero by 2050. The strategy aims to reduce emissions by two-thirds in just 15 years and support up to 80,000 jobs over the next thirty years and includes measures to produce 20 terawatt hours of the UK industry's energy supply from low carbon alternatives by 2030. It also aims to introduce new rules on measuring the energy and carbon performance of the UK's largest commercial and industrial buildings, providing potential savings to businesses of around £2 billion per year in energy costs in 2030 and aiming to reduce annual carbon emissions by over 2 million tonnes - approximately 10% of their current emissions.

B.85 HM Government, The Heat and Buildings Strategy (2021) sets out the government's plan to significantly cut carbon emissions from the UK's 30 million homes and workplaces. This strategy aims to provide a clear direction of travel for the 2020s, set out the strategic decisions that need to be taken this decade, and demonstrate how the UK plans to meet its carbon targets and remain on track for net zero by 2050.

B.86 Department for Business, Energy & Industrial Strategy, The Energy white paper: Powering our net zero future (2020) builds on the Prime Minister's Ten point plan for a green industrial revolution. The white paper addresses the transformation of the UK's energy system, promoting high-skilled jobs and clean, resilient economic growth during its transition to net-zero emissions by 2050.

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B.87 HM Government, The 25 Year Environment Plan (2018) 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. Published in January 2023, the Environmental Improvement Plan 2023 sets out the first revision of the 25 Year Environment Plan including further targets and goals to improve climate change mitigation and adaptation.

Health and well-being

B.88 Public Health England, PHE Strategy 2020-25 – identifies PHE’s priorities upon which to focus over this five-year period to protect people and help people to live longer in good health.

B.89 HM Government, Laying the foundations: a housing strategy for England (2011) – aims to provide support to the delivery of new homes and to improve social mobility.

B.90 Ministry of Housing, Communities and Local Government, Planning Policy for Traveller Sites (2015) – to be read in conjunction with the NPPF, this policy document sets out the Government’s planning policy for Traveller sites to ensure fair and equal treatment for Travellers.

B.91 Ministry of Housing, Communities and Local Government, National Design Guide (2021) – sets out the Government’s priorities for well-designed places in the form of ten characteristics: context, identity, built form, movement, nature, public spaces, uses, homes and buildings, resources and lifespan.

B.92 Department for Levelling Up, Housing and Communities, The Levelling Up the United Kingdom White Paper (2022) sets out how the UK Government will spread opportunity more equally across the UK. It comprises 12 UK-wide missions to achieve by 2030.

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B.93 The Levelling Up and Regeneration Bill (2022) sets out the direction for planning and makes provisions to support the levelling-up agenda. It seeks to streamline the planning process whilst attaching greater weight to development plans. It also aims to improve infrastructure delivery with a new levy system, improve alignment between plans to address cross-boundary issues, and will introduce added protection for heritage assets.

B.94 Prime Minister's Office, 10 Downing Street, Cabinet Office, and Department of Health and Social Care, Build Back Better: Our Plan for Health and Social Care (2021) sets out the government's new plan for health and social care. It provides an overview of how this plan will tackle the elective backlog in the NHS and put the NHS on a sustainable footing. It sets out details of the plan for adult social care in England, including a cap on social care costs and how financial assistance will work for those without substantial assets. It covers wider support that the government will provide for the social care system, and how the government will improve the integration of health and social care. It explains the government's plan to introduce a new Health and Social Care Levy.

B.95 Department of Health and Social Care and Cabinet Office, COVID-19 Mental Health and Wellbeing Recovery Action Plan (2021) sets out the Government's plan to prevent, mitigate and respond to the mental health impacts of the pandemic during 2021 and 2022. Its main objectives are to support the general population to take action and look after their own mental wellbeing; to take action to address factors which play a crucial role in shaping mental health and wellbeing outcomes; and, to support services to meet the need for specialist support.

B.96 Public Health England, Using the planning system to promote healthy weight environments (2020), Addendum (2021) provides a framework and starting point for local authorities to clearly set out in local planning guidance how best to achieve healthy weight environments based on local evidence and needs, by focusing on environments that enable healthier eating and help promote more physical activity as the default. The Addendum provides updates on the implications for planning for a healthier food environment, specifically on

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the hot food takeaways retail uses, and sets out recommended actions in light of changes to the Use Class Order (UCO) in England from 1 September 2020.

B.97 DEFRA, The 25 Year Environment Plan (2018) sets out goals for improving the environment over 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. The document identifies six key areas upon which action will be focused. Published in January 2023, the Environmental Improvement Plan 2023 sets out the first revision of the 25 Year Environment Plan including further targets and goals to improve health and wellbeing for communities across the UK.

Environment (biodiversity/geodiversity, landscape and soils)

B.98 Defra, A Green Future: Our 25 Year Plan to Improve the Environment (2018) – sets out goals for improving the environment over 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. The gov.uk website notes that the 25 Year Plan sits alongside two other important government strategies: the Industrial Strategy and Clean Growth Strategy (the former summarised in the Economic growth section below, the latter under Climate Change above).

B.99 Defra, 25 Year Environment Plan: progress reports (2020) – sets out the progress made in improving the environment through the 25 Year Plan and the indicator framework, which contains 66 indicators arranged into 10 broad themes.

B.100 HM Government, Environmental Improvement Plan 2023: First revision of the 25 Year Environment Plan (2023) - this plan builds on the 25 Year Environment Plan vision with a new plan setting out how the UK Government will work with landowners, communities and businesses to deliver each of their

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goals for improving the environment, matched with interim targets to measure progress.

B.101 Defra, Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011) – Guides conservation efforts in England up to 2020 by requiring a national halt to biodiversity loss, supporting healthy ecosystems and establishing ecological networks.

B.102 Defra, Biodiversity offsetting in England Green Paper (2013) – sets out a framework for biodiversity offsetting. Offsets are conservation activities designed to compensate for residual losses.

B.103 Defra, The Natura Choice: securing the value of nature (2011) – sets out a vision for the natural environment of England over the next 50 years. The white paper includes a programme of action which aims to improve the quality of the natural environment, halt species and habitat decline, and strengthen the connection between people and nature.

B.104 Defra, Landscapes Review (2019) – explores the fragmented and often marginalised system of managing National Parks and AONBs recommends actions to achieve structural reform. The review looks at:

- The existing statutory purposes for National Parks and AONBs and how effectively they are being met;
- The alignment of these purposes with the goals set out in the 25 Year Environment Plan;
- The case for extension or creation of new designated areas;
- How to improve individual and collective governance of National Parks and AONBs, and how that governance interacts with other national assets;
- The financing of National Parks and AONBs;
- How to enhance the environment and biodiversity in existing designations;

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- How to build on the existing eight point plan for National Parks and connect more people with the natural environment from all sections of society and improve health and wellbeing;
- How well National Parks and AONBs support communities; and
- The process of designating National Parks and AONBs and extending boundary areas, with a view to improving and expediting the process.

B.105 Defra, Safeguarding our Soils – A Strategy for England (2009) – 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.

B.106 Natural England, Climate Change Adaptation Manual (2020) – a resource to support practical and pragmatic decision-making relating to climate change adaptation. The manual brings together recent science, experience and case studies to be used by managers of nature reserves and other protected sites, conservation and land management advisors, and environmental consultants.

B.107 Natural England, National biodiversity climate change vulnerability model (2014) – a model that allows non-specialists to assess the vulnerability of areas of priority habitat to climate change based on widely accepted principles of climate change adaptation for biodiversity. It assists in the development of adaptation strategies for biodiversity.

B.108 The Environment Act 2021 sets statutory targets for the recovery of the natural world in four priority areas: air quality, biodiversity, water, and resource efficiency and waste reduction.

B.109 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations (2019) protect biodiversity through the conservation of natural

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habitats and species of wild fauna and flora, including birds. The Regulations lay down rules for the protection, management and exploitation of such habitats and species, including how adverse effects on such habitats and species should be avoided, minimised and reported.

Historic environment

B.110 The Heritage Alliance, Heritage 2020 – sets out the historic environment sector’s plan for its priorities between 2015 and 2020.

B.111 Historic England, Corporate Plan 2018-2021 - contains the action plan which sets out how the aims of the corporate plan will be delivered. The plan includes priorities to demonstrate how Historic England will continue to work towards delivering the heritage sector’s priorities for the historic environment.

B.112 Historic England, Sustainability Appraisal and Strategic Environmental Assessment: Historic England Advice Note 8 (2016) – sets out Historic England’s guidance and expectations for the consideration and appraisal of effects on the historic environment as part of the Sustainability Appraisal/Strategic Environmental Assessment processes.

B.113 The Environment Act 2021 sets out the UK’s new framework for environmental protection. It includes the creation of Conservation Covenant agreements between a landowner and a responsible body for the purposes of conservation. This can include to preserve land as a place of ‘archaeological, architectural artistic, cultural or historic interest.’

Water and air

B.114 Environment Agency, Managing Water Abstraction (2016) – Is the overarching document for managing water resources in England and Wales and links together the abstraction licensing strategies.

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B.115 Defra, Water White Paper (2012) – sets out the Government’s vision for the water sector including proposals on protecting water resources and reforming the water supply industry. It outlines the measures that will be taken to tackle issues such as poorly performing ecosystems, and the combined impacts of climate change and population growth on stressed water resources.

B.116 Defra, Clean Air Strategy (2019) – sets out the comprehensive action that is required from across all parts of government and society to meet goals relating to ensuring cleaner air. This is to be underpinned by new England-wide powers to control major sources of air pollution, in line with the risk they pose to public health and the environment, plus new local powers to take action in areas with an air pollution problem. The UK has set stringent targets to cut emissions by 2020 and 2030.

B.117 The Environment Act 2021 sets statutory targets for the recovery of the natural world in four priority areas: air quality, biodiversity, water, and resource efficiency and waste reduction. It also establishes the Office for Environmental Protection which will act as an impartial and objective body for the protection and improvement of the environment.

B.118 DEFRA, 25 Year Environment Plan (2018) key areas of the plan around which action will be focused in terms of the protection of air, land and water quality are:

- Using and managing land sustainably
- Recovering nature and enhancing the beauty of landscapes
- Increasing resource efficiency and reducing pollution and waste

B.119 HM Government, 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.

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B.120 The Water Environment Regulations (2017) protect inland surface waters, transitional waters, coastal waters and groundwater, and outlines the associated river basin management process.

B.121 DEFRA, The UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations (2017) provides the Government's ambition and actions for delivering a better environment and cleaner air, including £1 billion investment in ultra-low emission vehicles (ULEVs), 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.

Economic growth

B.122 HM Treasury, Build Back Better: Our Plan for Growth – sets out a plan to 'build back better' tackling long-term problems to deliver growth that delivers high-quality jobs across the UK while supporting the transition to net zero. This will build on three core pillars of growth: infrastructure, skills and innovation.

B.123 HM Government, Industrial Strategy: building a Britain fit for the future (2017) – sets out a long-term policy framework for how Britain will be built to be fit for the future in terms of creating a 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).

B.124 Infrastructure and Projects Authority, National Infrastructure Delivery Plan 2016-2021 – brings together the Government's plans for economic

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infrastructure over this five year period with those to support delivery of housing and social infrastructure.

B.125 LEP Network, LEP Network Response to the Industrial Strategy Green Paper Consultation (2017) – seeks to ensure that all relevant local action and investment is used in a way that maximises the impact it has across the Government’s strategy. Consultation responses set out how the 38 Local Enterprise Partnerships will work with Government using existing and additional resources to develop and implement a long-term Industrial Strategy.

B.126 The Levelling Up and Regeneration Bill (2022) sets out the direction for planning and makes provisions to support the levelling-up agenda. It seeks to streamline the planning process whilst attaching greater weight to development plans. It also aims to improve infrastructure delivery with a new levy system, improve alignment between plans to address cross-boundary issues, and will introduce added protection for heritage assets. The Bill also states that existing EU-generated systems of SEA, HRA and EIA will eventually be replaced by a simpler process known as ‘Environmental Outcomes Reports’.

B.127 HM Treasury, Build Back Better: Our Plan for Growth (2021): Sets out a plan to ‘build back better’ tackling long-term problems to deliver growth that delivers high-quality jobs across the UK while supporting the transition to net zero. This will build on three core pillars of growth: infrastructure, skills and innovation.

B.128 Agriculture Act 2020: sets out how farmers and land managers in England will be rewarded in the future with public money for “public goods” – such as better air and water quality, thriving wildlife, soil health, or measures to reduce flooding and tackle the effects of climate change, under the Environmental Land Management Scheme. These incentives will provide a vehicle for achieving the goals of the government’s 25 Year Environment Plan and commitment to reach zero emissions by 2050. The Act will help farmers to stay competitive, increase productivity, invest in new technology and seek a fairer return from the marketplace.

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B.129 DEFRA, Agricultural Transition Plan 2021 to 2024 (2020), aims to drive competitiveness, increase productivity, reduce carbon emissions, and generate fairer returns across the agricultural industry. The Transition Plan introduces several new schemes to improve the environment, animal health and welfare, and farm resilience and productivity (e.g., grants will be available for sustainable farming practices, creating habitats for nature recovery and making landscape-scale changes such as establishing new woodland and other ecosystem services).

B.130 Department for Business, Energy & Industrial Strategy, UK Industrial Strategy: Building a Britain fit for the future (2018) lays down a vision and foundations for a transformed economy. Areas including artificial intelligence and big data; clean growth; the future of mobility; and meeting the needs of an ageing society are identified as the four 'Grand Challenges' of the future.

Transport

B.131 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.

B.132 Department for Transport, The Strategic Road Network and the Delivery of Sustainable Development Circular 02/13 (2013) sets out how Highways England engage with communities and the development industry to deliver sustainable development and economic growth, whilst safeguarding the primary function and purpose of the strategic road network.

- Defra, Rights of Way Circular 01/09 – sets out advice for local authorities on recording, managing and maintaining, protecting and changing public rights of way.

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B.133 HM Government, The Levelling Up the United Kingdom White Paper (2022) sets out how the UK Government will spread opportunity more equally across the UK. It comprises 12 UK-wide missions to achieve by 2030, which includes the following key mission relating to transport and travel:

- By 2030, local public transport connectivity across the country will be significantly closer to the standards of London, with improved services, simpler fares and integrated ticketing.

B.134 The Environment Act 2021 sets statutory targets for the recovery of the natural world in four priority areas: air quality, biodiversity, water, and resource efficiency and waste reduction. It also establishes the Office for Environmental Protection which will act as an impartial and objective body for the protection and improvement of the environment. The Act sets out legislation which covers local air quality management frameworks and the recall of motor vehicles.

B.135 Department for Transport, Decarbonising Transport: A Better, Greener Britain (2021) The Decarbonisation Transport Plan (DTP) sets out the Government's commitments and the actions needed to decarbonise the entire transport system in the UK. It follows on from the Decarbonising Transport: Setting the Challenge report published in 2020. The DTP commits the UK to phasing out the sale of new diesel and petrol heavy goods vehicles by 2040, subject to consultation, in addition to phasing out the sale of polluting cars and vans by 2035. The DTP also sets out how the government will improve public transport and increase support for active travel, as well as creating a net zero rail network by 2050, ensuring net zero domestic aviation emissions by 2040, and a transition to green shipping.

B.136 Department for Transport, The Cycling and Walking Investment Strategy Report to Parliament (2022) sets out the objectives and financial resources for cycling and walking infrastructure. It states the Government's long-term ambition is to make walking and cycling the natural choices for shorter journeys. It aims to double cycling by 2025, increase walking activity, increase the percentage of children that usually walk to school and reduce the number of cyclists killed or seriously injured on England's roads.

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B.137 Department for Transport, Decarbonising Transport: Setting the Challenge (2020) sets out the strategic priorities for the new Transport Decarbonisation Plan (TDP), published in July 2021. It sets out in detail what government, business and society will need to do to deliver the significant emissions reduction needed across all modes of transport, putting us on a pathway to achieving carbon budgets and net zero emissions across every single mode of transport by 2050. This document acknowledges that while there have been recently published strategies to reduce greenhouse gas emissions in individual transport modes, transport as a whole sector needs to go further and more quickly, therefore the TDP takes a coordinated, cross-modal approach to deliver the transport sector's contribution to both carbon budgets and net zero.

B.138 Department for Transport, Transport Investment Strategy (2017): Sets out four objectives that the strategy aims to achieve:

- Create a more reliable, less congested, and better connected transport network that works for the users who rely on it;
- Build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities;
- Enhance our global competitiveness by making Britain a more attractive place to trade and invest; and
- Support the creation of new housing.

B.139 Highways England, Highways England Sustainable Development Strategy and Action Plan (2017): This strategy is designed to communicate the company's approach and priorities for sustainable development to its key stakeholders. Highways England aims to ensure its action in the future will further reduce the impact of its activities seeking a long-term and sustainable benefit to the environment and the communities it serves. The action plan describes how Highways England will progress the aspirations of their Sustainable Development and Environment Strategies. It describes actions that will enable the company to deliver sustainable development and to help protect and improve the environment.

Appendix C

Baseline Evidence

C.1 The baseline information identifies current sustainability issues and problems in the Garden Community and wider area which should be addressed and provides a basis for predicting and monitoring the effects of implementing the document.

C.2 To ensure the data collected was relevant and captured the full range of sustainability issues it was categorised under 13 thematic topics. They cover all the topics referred to in Annex 1(f) of the SEA Directive and follow the order of:

- Economy and employment;
- Housing;
- Population and society;
- Health;
- Transport;
- Cultural heritage;
- Biodiversity and nature conservation;
- Landscapes;
- Water environment;
- Climate and energy;
- Air;
- Waste; and
- Minerals.

Economy and employment

Economy

C.3 The area covered by the broad Garden Community area comprises a large part of the Haven Gateway, an established partnership area which is identified in a range of existing strategy and investment documents. The Haven Gateway includes the Essex administrative areas of Braintree, Colchester, Maldon and Tendring Councils and extends northwards into parts of Suffolk.

C.4 Colchester Town is a major centre of employment within the strategic area and in close proximity to the proposed Garden Community area. While there are high levels of commuting to London, (please see the transport section below for further details) many residents work and live within the area with significant commuting across borough and district boundaries, reflecting a functional economic geography.

C.5 The area has a mixed economy focused on the service sector, including wholesale and retail, business services, tourism, health and education, alongside manufacturing, logistics and construction. Due to the extensive rural area outside urban settlements, agriculture and its related industries play an important part in the overall economy.

C.6 The Cultural, Visitor and Tourism sector, which encompasses a range of activities including visitor attractions, leisure facilities, food and accommodation, plays an important role in Tendring District's economy. This sector is worth more than £402 million to the economy and is estimated to provide 9,000 jobs and around 350 businesses across Tendring. In 2018, there were 3,986,100 day trips and overnight stays. The majority of jobs (approx. 8%) and businesses (approx. 10%) in this sector are located in and around Clacton which is a similar concentration to the national average. In most of the rest of the towns in Tendring businesses operating within this sector are slightly more concentrated than the national average.

Table C.1: Economic Activity [See reference 31]

	Tendring	Colchester	East of England	Great Britain
Number of economically active	55,500	97,000	N/A	N/A
Percentage of the population economically active	67.9%	75.8%	80.3%	78.6%

C.7 According to the latest labour market statistics (from July 2021 to June 2022) [See reference 32], 75.8% for Colchester and 67.9% for Tendring people are economically active. In November 2022, 3,290 people (2.6%) in Colchester claimed out of work benefits, which represents a drastic increase from 2,240 in May 2019. This increase in claimants reflects the economic implications of COVID-19 pandemic. Despite this, Colchester’s claimant rate is lower than the regional average (2.9%) and national average (3.7%). In November 2022, 3,325 people (4.2%) in Tendring claimed out of work benefits, which represents a drastic increase from 2,240 in May 2019. This increase in claimants reflects the economic implications of COVID-19 pandemic. As of August 2021, Tendring’s claimant rate is higher than the regional average (2.9%) and national average (3.7%).

C.8 According to the latest labour market statistics, 75.8% of people in Colchester are economically active. Of this, 74.3% are in employment and 68.9% are employees. 2.9% of the total population in Colchester are unemployed, which is lower than both the regional average (3%) and the national average (3.8%). As of June 2022, of those that are economically inactive, 27% are classed as 'looking after family/home', whilst 28.1% are students. 67.9% of people in Tendring are economically active. Of this, 66.7% are in employment, 54.1% are employees and 12.6% are self-employed. 3.7%

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of the total population in Tendring are unemployed, which is higher than the regional average (3.0%) and national average (3.8%).

C.9 Colchester’s job density is 0.74, which is lower than both the regional average (0.85) and national average (0.84). Colchester has lower earnings per worker (£595.30) compared to the East of England average (£628.60) and national average (£613.10). The three main occupations in Colchester in 2020/21 were professional occupations (29.2%), managers, directors and senior officials (13.8%), and skilled trades occupations (12.2%). The Borough’s largest employment industries are human health and social work activities (17.1%), wholesale and retail trade, and repair of motor vehicles and motorcycles (15.9%), and education (12.2%). The largest employers in Colchester by approximate number of employees are Colchester District General Hospital with 3,000 employees; University of Essex with 2,000 employees; Colchester Borough Council with 1,500 employees; and Colchester Institute with 900 employees. The largest private sector employer is Monthind Clean Ltd, an industrial cleaning company, which employs approximately 800 people.

Table C.2: Job density [See reference 33]

	Tendring	Colchester	East of England	Great Britain
Job Count	52,000	94,000	N/A	N/A
Job Density	0.65	0.74	0.85	0.84

C.10 Job density represents the ratio of total jobs to population aged 16-64. Colchester and Tendring both have a lower job density than the regional and national average.

Table C.3: Business registration and de-registration rate (2020)

[See reference 34]

	Tendring	Colchester	Essex	East of England	Great Britain
Birth	565	910	7,840	32,015	351,350
Death	435	810	7,335	30,125	311,410
All active enterprises	4,775	8,300	73,285	295,925	2,938,870

C.11 There has been a slight increase in the number of active businesses in Tendring due to a higher rate of registrations than de-registrations. Compared to sub-national and national figures the district has experienced a lower start up rate and a lower de-registration rate indicating a slightly less robust local economy. Colchester is more in line with the county and national business registration and de- registration rates.

Table C.4: Local business stock and employment size [See reference 35]

	Tendring	Colchester	East of England
Business Enterprises	4,470	7,455	271,395
Small (10 to 49)	8.9%	9.3%	8.1%
Medium (50 to 249)	1.6%	1.7%	1.5%
Large (250+)	0.3%	0.4%	0.4%

C.12 Nearly 90% of all local businesses within Tendring and Colchester authorities employ 9 or less people and approximately 1.5% employ 50 or more people. These figures are similar to the county, region and country but with

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some slight variation. Tendring has a lower percentage of micro businesses than the region and the country and Colchester has a slightly higher proportion of large businesses.

Table C.5: Businesses by industry type [See reference 36]

Industry	Tendring	Colchester	Essex	East of England	Great Britain
Agriculture, Forestry & Fishing	245	235	2,030	10,945	124,160
Production	295	415	4,000	15,525	149,030
Construction	975	1,320	13,940	46,265	363,785
Motor Trades	220	250	2,220	9,150	78,235
Wholesale	145	260	2,730	10,755	105,260
Retail	380	500	4,205	18,440	218,315
Transport & Storage (Including Postal)	280	310	3,035	15,570	134,910
Accommodation & Food Services	400	390	3,220	14,465	170,700
Information & Communication	165	480	3,985	18,835	194,005
Finance & Insurance	55	190	1,355	5,275	59,190
Property	140	325	2,545	10,390	108,300
Professional, Scientific & Technical	450	1,110	9,715	41,370	424,705

Industry	Tendring	Colchester	Essex	East of England	Great Britain
Business Administration & Support Services	365	645	6,115	23,295	225,825
Public Administration & Defence	20	30	245	1,395	7,740
Education	65	155	1,190	4,830	46,040
Health	185	370	2,355	9,730	103,400
Arts, Entertainment, Recreation and Other Services	280	430	3,915	16,460	176,150

C.13 There are comparatively more businesses in the industries of agriculture, forestry and fishing, production, motor trades, retail, transport and storage, accommodation and food services, health and arts, entertainment, recreation and other services within Tendring District than the county but noticeable fewer businesses within professional, scientific and technical. Other industries with proportionately lower business numbers than the county levels are construction, wholesale, information and communication, finance and insurance, property and business administration and support services. Colchester is closer to the Essex average, with similar proportions for multiple industries and only slight variances in others. The most significant differences are in the construction, production, retail, health and transport and storage.

Employment

C.14 Tendring District is home to Harwich International Port (part of Freeport East) which has developed into a highly efficient, multi-purpose freight and passenger port handling bulk and container ships as well as roll-on, roll-off

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ferries and cruise ships. Harwich is one of the major UK ports for ferry and cruise tourism, with passenger figures for 2020 at 347,000. This is a decrease on 2019 where the number was 691,000 which had remained steady since 2007. The drop in passenger numbers in 2020 was likely due to the COVID-19 pandemic limiting international travel [See reference 37] [See reference 38]. During 2014 a total of 43 port calls were made by cruise ships at the port. Harwich is also one of the leading UK freight ports for bulk and container ships. In 2017, freight movement was at 334.8 thousand units, falling within one of the top ten ports in the UK in terms of roll on roll off freight movement. The majority of the freight comes from the European Union [See reference 39]. The port also supports the off-shore renewables industry providing an installation base for the Gunfleet Sands wind farm and support facilities for the installations at Foreness Point, Kent and Greater Gabbard off the coast in Suffolk.

C.15 In 2013 permission was granted for the expansion of Bathside Bay to create the new Harwich International Container Terminal, a small boat harbour with sheltered moorings and public amenity space. The new terminal is expected to include 1,400 metres of quayside, a 14.5 metre deep approach channel able to accommodate increasingly large container ships, 50 plus gantry cranes, a container storage yard and rail terminal. Bathside Bay also has the potential to be a multi-functional site for the manufacture and assembly of wind turbines. The expansion of Bathside Bay, with the provision of amenity and commercial space as well as port expansion will provide jobs at the port and in supporting industries both during construction and once in operation.

C.16 Colchester has an overall requirement for 32.5 ha of land for industrial and business use, over the period of the Local Plan. The requirement was previously identified as 39.7 ha, however, the 39.7 ha of employment land previously identified as being suitable to support demand has been reduced as a result of the reductions in the Stanway allocations and the deletion of the Colchester/Braintree Borders Garden Community. Given the time period between the publication of the plan and the Section 2 Examination and in light of the review of employment land contained in the ELR, Tendring has now updated the list of supply of sites to be allocated. This reflects the current market status quo and identifies 36.6 hectares of employment land across the district.

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C.17 The industry classes employing the most people in Colchester and Tendring are 'wholesale and retail, repair of motor vehicles and motorcycles' and 'human health and social work activities' classes, which accounted for 15.9% and 17.1% of jobs respectively in Colchester and 17.5% respectively in Tendring in 2021. The next largest industry classes in Colchester are 'education' at 12.2% and Accommodation And Food Service Activities and Professional, Scientific And Technical Activities both at 8.5%. The next largest industry classes in Tendring are 'Human Health And Social Work Activities' at 17.5% and 'Accommodation And Food Service Activities' at 11.2%. The largest employers in Colchester by approximate number of employees are Colchester District General Hospital with 3,000 employees; University of Essex with 2,000 employees; Colchester Borough Council with 1,500 employees; and Colchester Institute with 900 employees. The largest private sector employer is Mothkind Clean Ltd, an industrial cleaning company, which employs approximately 800 people.

C.18 The average weekly wage for full time works in 2021 was £595.30 in Colchester and £573.00 in Tendring. This compares to the national average of £613.10 for Great Britain. The gross disposable household income per head in 2019 was £20,570 in Colchester and £18,153 in Tendring [\[See reference 40\]](#).

C.19 Tourism plays an important part in the local economy. Tourism contributed £379 million to the Colchester's economy in 2018 [\[See reference 41\]](#). The value of tourism to Colchester has risen in real terms by 158% from £63.1 million in 1993. Tourism supports more than 4,612 full time jobs, equating to 5.3% of total employment in the Borough. Colchester attracted 4,574,000 million day trips and 450,000 overnight trips in 2021/22. The number of day trips has almost halved based on the 2018 figures. However, the number of overnight stays has increased since 2018 from 272,000 to 450,000 in 2021/22. In 2017 the total value of tourism was £379,393,300 which has decreased to £171,600,000 in 2020/21 and subsequently increased to £259,300,000 in 2021/22. As a result of travel restrictions imposed by the COVID-19 pandemic, tourism was negatively impacted resulting in less trips and revenue [\[See reference 42\]](#).

C.20 Colchester has 1,300 creative businesses providing employment to over 5,600 employees. Creative industries are a priority growth area for the town. This accounts for 18.3% of all businesses in the Borough, and includes advertising, design, film, arts and crafts, performing arts and publishing. Nationally, creative industries account for approximately 7% of the economy as a whole. This shows that Colchester is a well-performing town in terms of its creative economy but that there is considerable room for growth.

Table C.6: Employment and unemployment [See reference 43]

	Tendring	Colchester	East of England	Great Britain
In employment	62.7%	74.3%	77.9%	75.5%
Unemployed	3.7	2.9%	3.0%	3.8%

C.21 The percentage of economically active people in employment has reduced in Colchester since the Scoping Report was published with figures from 2016/17 from 78.6% to 71.3%. The number of economically active people currently sits at 75.8% in 2021/22. The in employment figure in Colchester is now below the regional average but aligns with the national average. The in employment figure in Tendring has also reduced since 2016/17, but the percentage of unemployed has also reduced.

C.22 Unemployment within Tendring District had risen at a faster rate than that of regional and national levels but has since been in decline from 2013. During July 2007 and June 2008 around 6.1% of the working age population was unemployed in Tendring but following an increase to a high of 10.2% in April 2012-March 2013, unemployment had decreased to 5.5% during April 2016 and March 2017 and 3.7% in 2021/22.

C.23 In Colchester, unemployment was high at 7.2% in April 2009 – March 2010 and steadily reduced to 6.2% in April 2011 – March 2012. Between July

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2011 and September 2012, the unemployment rates rose sharply to 7.4% representing a peak in unemployment rates in Colchester since January 2004. This is in line with the economic downturn experienced across England at this time. Since then, the unemployment rate has decreased every monitoring period to the rate of 4.0% in April 2016 to March 2017. This decrease has continued with an unemployment rate of 2.9% in 2021/22.

Table C.7: Working patterns [See reference 44]

	Tendring	Colchester	East of England	Great Britain
Full time	60%	61%	66.9%	68.1%
Part time	40%	37.8%	33.1%	31.9%

C.24 As of 2020, 60% of jobs within Tendring and 61% of jobs within Colchester were classed as full- time. Tendring and Colchester are lower than the trends in working patterns found in Essex. Colchester and Tendring have a lower percentage of full-time jobs than Great Britain as a whole.

C.25 Colchester has approximately 435,000m2 of retail floorspace; 208,000m2 of office floorspace; 644,000m2 of industrial floorspace; and 110,000m2 classed as ‘other’ floorspace. According to the 2020 Retail and Town Centre Study Update [See reference 45], vacancy levels in Colchester town centre have increased from 10.5% of total ground floor premises to 14.5%. This is above the national average of 12%. Retail capacity is anticipated to decline by 3,900 sqm in Colchester from structural changes in the retail sector and the economic implications of the COVID-19 pandemic. Clacton Town Centre in Tendring has also experienced an increase in vacancies, in 2019 the vacancy rate was 9.2% [See reference 46], further analysis indicates that whilst this is lower than the national average the trend is that the gap is reducing as vacancies are increasing. The full effects of the pandemic and altered shopping patterns are still emerging.

C.26 Drawing on the conclusions of the Retail and Town Centre Study Update [See reference 47], the Council's Topic Paper on Retail and Town Centre Policies [See reference 48] reports that Colchester town centre continues to perform reasonably well against many of the healthcheck indicators. Yet there are weaknesses and signs that the town centre is increasingly vulnerable to structural changes in the retail sector and growing competition from nearby shopping destinations. The current outlook and the committed developments at Tollgate (Stanway) in particular, reinforce the need for measures to maintain the town centre's attractiveness and role as the principal mixed-use shopping destination in Colchester Borough. This includes continued investment in the public realm and key opportunity sites (including Vineyard Gate, Priory Walk and St John's Walk Shopping Centre) to improve the visitor experience and create a more vibrant, differential offer.

C.27 Creative Colchester recognises culture and creativity as a driver of job creation, economic growth and sustainable community development to raise the profile of the town overall. A vision document has been created, in which the main opportunities are set out for the development of the creative industries over the next five years.

C.28 Colchester Borough Council is leading regeneration programmes in East Colchester, North Colchester, the Town Centre and the Garrison. In East Colchester a new waterside community is emerging at the Hythe, the town's former port. The £13 million regeneration programme will create a mixed-use development alongside the River Colne with 100,000 sq ft of commercial space, 2,000 new homes and improved transport links. The transformation of the area is already underway with new housing, employment areas, community centre, nursery and student accommodation for the University of Essex at University Quays. The University Knowledge Gateway will bring new business opportunities, hotels and leisure facilities.

C.29 To the North of the town, alongside the A12, lies a 100 hectare development site. Plans for the area will see the creation of 1500 new homes and new employment areas to create up to 3500 new jobs. Opened in 2008, the site is already home to the Weston Homes Community Stadium. As well as

being Colchester United Football Club's home, the venue also offers space for concerts, events, community space for Colchester United Community Sports Trust to develop its programme of activities and conference facilities for up to 400 people. In 2021 the Northern Gateway Sports Park opened. As part of the regeneration programme for North Colchester a Master Plan has been prepared for North Station, which is a key gateway into the town.

C.30 A £1.5 billion development of a new modern Garrison in the town has shown a further 35 years commitment to Colchester by the MoD. As well as creating improved accommodation and facilities for service personnel, land released by the MoD as a result of the new development is being used to create a sustainable mixed use urban village close to the Town Centre.

C.31 Improvements in the Town Centre have previously been focused on the St. Botolph's Quarter, with ongoing plans to develop a new cultural quarter, large retail scheme, Magistrate's Court, residential development and multi-storey car park. However, plans to improve the wider town centre are now underway with proposals being developed to reduce traffic and create a better pedestrian experience with more public spaces for events and activities and better links for cyclists ensuring that Colchester continues to be a vibrant place during the day and in the evening. The Borough has recently been awarded £18.2 million from the Government's Town Deal Fund to boost a range of projects to improve the town centre including the creation of digital work hubs, accelerated introduction of 5G, restoration of the Holy Trinity Church, and phase one of restoring 'Jumbo' the iconic Victorian water tower.

North Essex Garden Communities Employment & Demographic Studies

C.32 Under the 'most likely' demographic scenario (2,500 dwellings by the end of the plan period (2033), with construction continuing at similar annual rates thereafter until completion of the new settlement; and assumptions for in- and out-migration based on those for similar new settlements), population is

estimated to peak at just over 20,000 by 2051. Total population is then expected to decline, due to ageing of the population (as older people form smaller households), and under the assumption of no new houses being built.

C.33 A faster, more ambitious, build-out rate would lead to a slightly higher peak population (which would be reached sooner), due to the larger numbers of young population and children moving into the settlements. During the earlier phases of the development, there is likely to be faster growth in children of primary and secondary school age under an accelerated build-out rate, as younger adults moving in are more likely to bring children with them or form families shortly after moving in, increasing demand for schools. Once the settlement is completed and the population starts to age, the number of children of primary and secondary school age will decline more steeply in an accelerated build-out rate scenario, resulting in a much lower requirement for local schools.

C.34 The number of people aged 70 and over would grow at a faster rate under an accelerated build-out rate, as more people move in during the early phases of the development and the existing population starts to age. As a result, at its peak (around 40 years after building is completed), the elderly population is slightly larger in an accelerated build-out rate scenario, increasing the need for elderly care services.

Housing

Housing need – Strategic Housing Market Assessment (SHMA)

C.35 Meeting the housing needs in the Districts and Borough is an important issue. The Strategic Housing Market Assessment (SHMA) Update (2015) observed that, due to the requirement for significant deposit to access a mortgage, few households aspiring to home ownership would have access to sufficient funds to purchase a home. The Update identifies a notable increase in

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the proportion of households in the private rented sector and a decrease in all other tenure groups with owner-occupiers with a mortgage recording the biggest fall.

Table C.8: Size mix of housing requirement (per annum) in Tendring [See reference 49]

Housing type – Market housing	Count	Percentage
Market homes – 1 bedroom	38	8.8%
Market homes – 2 bedroom	121	27.9%
Market homes – 3 bedroom	176	40.6%
Market homes – 4 + bedroom	99	22.8%
Shared ownership – 1 bedroom	6	100.0%
Shared ownership – 2 bedroom	0	0.0%
Shared ownership – 3 bedroom	0	0.0%
Shared ownership – 4 + bedroom	0	0.0%
Affordable rent/social rent – 1 bedroom	11	7.0%
Affordable rent/social rent – 2 bedroom	75	47.8%
Affordable rent/social rent – 3 bedroom	48	30.6%
Affordable rent/social rent – 4 + bedroom	23	14.6%

Table C.9: Size mix of housing requirement (per annum) in Colchester [See reference 50]

Housing type – Market housing	Count	Percentage
Market homes – 1 bedroom	28	4.3%
Market homes – 2 bedroom	166	25.9%

Housing type – Market housing	Count	Percentage
Market homes – 3 bedroom	294	45.8%
Market homes – 4 + bedroom	154	24.0%
Shared ownership – 1 bedroom	9	75.0%
Shared ownership – 2 bedroom	3	25.0%
Shared ownership – 3 bedroom	0	0.0%
Shared ownership – 4 + bedroom	0	0.0%
Affordable rent/social rent – 1 bedroom	81	30.5%
Affordable rent/social rent – 2 bedroom	86	32.3%
Affordable rent/social rent – 3 bedroom	62	23.3%
Affordable rent/social rent – 4 + bedroom	37	13.9%

Affordable rented / social rented housing

C.36 The updated SHMA for Braintree, Colchester, Clemsford and Tendring indicates that the majority of market housing and affordable housing should be 2 and 3 bedroom properties. This trend is replicated when assessing all housing, with 70.3% of housing need across the District and Borough is 2 and 3 bedroom dwellings.

Table C.10: SHMA guidance on property size targets [See reference 51]

Type	1 to 2 bedrooms	3 to 4 bedrooms
Social rented	70%	30%
Intermediate market housing	65%	35%

Type	1 to 2 bedrooms	3 to 4 bedrooms
Market housing	70%	30%

C.37 In relation to meeting the housing needs of older people, the SHMA also recommends that the Councils consider:

- The type and quality of existing sheltered stock in meeting today’s housing standards and preferences and the scale of need and demand for 648 units by 2018.
- The large future on-going requirement for ‘extra care’ accommodation to meet the significant growth in the number of people over 85.

Housing Supply

C.38 The current trajectory for Tendring District shows that by 2033 there will be 6,115 completions (since 2015). Annual completion rates will fall significantly from 2020 below the 430 annual average rate of provision. As stated in Housing Trajectory and Statement of 5-Year Land Supply (2011), this reflects the fact that the sites identified in the Adopted Local Plan have been completed.

C.39 In relation to potential supply, 1,061 homes have been built in 2011/12 and 2012/13. As at April 2013, 1,970 homes had been granted Planning Permission on larger sites i.e 6 units or more. A further 243 are considered deliverable but do not have planning permission - these sites are phases of larger developments which were allocated in the previous Local Plan but have not yet been built. Historical evidence shows that windfall sites make a contribution to the number of annual completions, and it is forecast that in the light of available sites and planning policy, windfall sites will continue to be permitted and built in the future at a rate of 50 dwellings per year. Taking this into account this plan needs to deliver 6,286 homes on new sites. Since April 2013 a number of sites have been granted planning permission which will contribute to meeting this need.

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C.40 Of the 245 new homes built in Tendring in 2015/16, 37% of these homes were built on previously developed land (PDL). This is lower than the results recorded over the last decade for individual recording years due partly to the change in definition of PDL in national planning policy (residential garden land in urban areas is now considered to be greenfield land rather than PDL as it was previously) [See reference 52]. As of 2021/22, Colchester had 24 sites on the brownfield register and several of these sites are currently going through the planning application process [See reference 53].

C.41 According to the 2021 Colchester Infrastructure Delivery Plan Update [See reference 54], 920 dwellings per year (totalling 18,400) are expected to be delivered in the Borough over the plan period of 2013-2033. There have been 7,804 new dwellings completed since 2013/14 which, when added to the supply of 11,895, results in a total of 19,699 units. 4,075 dwellings have been completed since the Local Plan was submitted in 2017 [See reference 55].

C.42 According to the latest Authority Monitoring Report, between 1 April 2019 to 31 March 2020, a total of 1,034 new homes were provided and 117 affordable homes were delivered [See reference 56]. 550 dwellings per year (totalling 11,000) are expected to be delivered in Tendring over the plan period of 2013-2033. There have been 4,739 new dwellings completed since 2013/14.

C.43 In October 2022, the average household price in Colchester was £324,397 [See reference 57]. This illustrates an 20.4% increase from £269,250 in October 2021. The average household price for Tendring as of October 2022 is £284,527. In October 2021, the average household price was £246,055 indicating a 15.6% increase. This is lower than the national average (£316,073) and the Essex average (£384,981).

C.44 To date, the highest proportion of affordable housing achieved within Tendring was in 2009/10 at 43.8% which accounted for 140 of the total number of dwellings completed. Colchester saw its peak affordable housing completions of 44.2% in the year 2011/2012. Between 2021/22, 117 affordable homes (of which 72 homes were acquired by the council) were delivered, accounting for

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11% of the total homes delivered in Colchester [See reference 58]. Within Tendring, 7 new affordable homes were delivered between 2015/16.

Table C.11: Affordable housing supply in Tendring District (net) [See reference 59]

Year	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Net Completed Dwellings	610	370	-	320	210	380	240	240	260	245	658	565	915	784	646	777
Affordable Completed Housing	20	70	30	140	20	160	70	10	10	23	14	31	16	95	94	56
Percentage Affordable Housing Completed	3.3%	18.9%	-	43.8%	9.5%	42.1%	29.2%	4.2%	3.8%	9.4%	2.1%	5.5%	1.7%	12.1%	14.6%	7.2%

Table C.12: Affordable housing in Colchester Borough (net)

Year	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Net Completed Dwellings	1,290	1,490	780	690	700	860	650	740	650	1,149	912	1,048	1,165	1,124	741	1,034

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Year	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Affordable Completed Housing	160	290	140	260	190	380	130	70	260	149	100	132	110	202	112	121
Percentage Affordable Housing Completed	12.4 %	19.5 %	17.9 %	37.7 %	27.1 %	44.2 %	20.0 %	9.5%	40%	13%	10.96 %	12.5 %	9.4%	18%	15.1 %	11.7 %

Existing Housing Stock

Table C.13: Dwelling stock by tenure [See reference 60]

	Local Authority (incl. owned by other LAs)	Private Registered Provider	Other public sector	Private sector	Total
Tendring	4%	4%	0%	92%	71,688
Colchester	7%	8%	0%	86%	83,268
England	6%	10%	0%	83%	24,873,321

C.45 The composition of dwelling stock for Tendring and Colchester is similar to that of Essex and England with the majority of dwellings being in the private sector. However, Tendring District reported the highest proportion of stock within the private sector at 92% as well as a smaller proportion of Local Authority owned dwellings compared with Colchester, Essex and England at 4%. This is a higher difference between those figures than in Essex and England. In contrast there were proportionately fewer dwellings owned by Private Registered Providers in Tendring than any other area.

Table C.14: Mean dwelling prices (£) as of November 2021 [See reference 61]

Administrative area	Average dwelling price
Tendring	£251,459
Colchester	£297,861
Essex	£353,594

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Administrative area	Average dwelling price
East of England	£336,937
England	£288,130

C.46 The mean dwelling price in November 2021 in Tendring District was £251,459 and in Colchester Borough it was £297,861. This is lower than the county mean of £353,594, regional mean of £336,937 but Colchester is higher than the national mean of £288,130.

C.47 There was an estimated 75,500 households in Colchester in 2018 and an estimated 61,500 households in Tendring in 2018.

C.48 There are 64 Residential Care Homes in Tendring, the highest number in any district in Essex and the care sector is the second highest employer in the District. With the population of over 65s projected to rise by 39% during the period (2016-31) consideration will need to be given to the needs of an ageing population to encourage independent living and provide assisted living for those who require it. Development will need to assure that accommodation for our ageing population is integrated into communities to ensure that older people do not become isolated.

C.49 Flats are considered to be the entry level stock in the District and the average price for a flat is £169,881 in Colchester and £136,337 in Tendring as of January 20221 [See reference 62]. The need for a significant deposit has been a major factor in preventing access to the market for new forming households since 2008. 93.8% had less than £10,000 in savings and unless significant family financial support is available, these households will find it very difficult to access the local market and will be limited to the rental or intermediate market. Access to the private rented housing market is also restricted by cost.

Gypsy and Traveller Accommodation

C.50 Within Colchester, the most recent accommodation assessment identified 1 public site (12 pitches); 9 private sites (15 pitches); 1 tolerated site (1 pitch); and no temporary, transit or unauthorised sites. This equates to a total of 28 pitches. There are no Travelling Showpeople yards in the Borough. The overall level of additional need for those households who meet the planning definition of a Gypsy or Traveller is for 2 additional pitches over the Gypsy and Traveller Accommodation Assessment (GTAA) period to 2033 due to new household formation. Total need for 10 additional pitches has been identified from households that do not meet the planning definition [\[See reference 63\]](#).

C.51 Within Tendring, the most recent accommodation assessment identified identified no public sites; 9 private sites (16 pitches); no temporary or transit sites; and 1 unauthorised site (1 pitch). There are no Travelling Showpeople yards in the District. There are also 2 sites awaiting the determination of planning consent (6 pitches). The total additional need for those households who meet the planning definition of a Gypsy or Traveller is for 2 pitches over the GTAA period to 2033. Total need for 3 additional pitches has been identified from households that do not meet the planning definition [\[See reference 64\]](#).

Population and Society

Population

C.52 As well as an overall increase in population over Local Plan periods, we can also expect to see an ageing population within Tendring District. This will also increase pressure on health provision and the care industry.

Table C.15: Population [See reference 65]

	2001	2014	2016	2021
Tendring	138,800	139,900	142,600	148,934
Colchester	156,000	180,400	186,600	192,424
East of England	5,400,500	6,018,400	6,130,500	6,348,096
Great Britain	57,424,200	62,756,300	63,785,900	65,121,729

C.53 Since 2001, the population of Tendring has grown at a significantly lower rate than that of the region and the country. At 0.79% it is considerably below the national population growth rate of 8.50%.

C.54 Colchester is the largest local authority area in Essex in terms of population size. In mid-2021, approximately 63.2% of the total population were aged 16-64, while an estimated 17.9% of people in Colchester over 65 years old. The population projections for Colchester predict that the population will increase to 228,062 by 2043 [See reference 66]. The projected number of households in the authority is forecast to grow by 22.4% between 2018 and 2043 which is above the England average (16.2%) [See reference 67].

C.55 The population projections for Colchester predict that the population will increase to 228,062 by 2043 and the population of Tendring will increase to 175,427 by 2043 [See reference 68]. The projected number of households in Colchester is forecast to grow by 22.4% between 2018 and 2043 which is above the England average (16.2%) [See reference 69].

Table C.16: Population age structure [See reference 70]

	Tendring	Colchester	Essex
Persons aged 0-4	7,294	11,435	85,981
Persons aged 5-14	15,389	22,812	177,057
Persons aged 15-19	7,026	11,303	78,960
Persons aged 20-44	33,540	67,768	437,268
Persons aged 45-64	39,485	46,036	395,198

Education

C.56 There are 47 maintained schools in Tendring District, 41 primary schools and 6 secondary schools. There are 2 adult education centres offering a range of courses from beauty therapy and arts and crafts to training courses aimed at the business community.

C.57 There are 79 maintained schools in Colchester Borough: 64 primaries, 11 secondaries and 4 special schools. There are two higher education colleges, Colchester Sixth Form College and the Colchester Institute, plus the University of Essex, making the Borough a major educational base with visiting students significantly adding to the diversity of the population. The provision of day care,

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nursery education and out-of-school care remains an issue for the Borough, with there being more demand than formal supply.

C.58 Essex County Council has a statutory responsibility to ensure there are sufficient school places available every year, that there is diversity across the school system and parental preference is maximised. The Essex 10 Year Plan – meeting the demand for school places 2021-2030, sets out the requirement, supply and demand for places in maintained primary and secondary schools over a 10 year period and is updated annually to ensure projections of demand and capacity are as accurate as possible.

C.59 There is a significant demand for school places in Essex. The total number of pupils by 2030/31 will reach 131,635 primary pupils and 99,693 secondary school pupils (including sixth form) [See reference 71]. Colchester Borough is anticipated to experience significant capacity issues in its primary schools from 2025 onwards, particularly in Colchester North, Colchester Southwest Stanway and Colchester Rural South. To manage demand, a new school (Trinity School) opened in September 2021 for secondary school pupils. A primary school will open on a shared site in 2024 to provide between 60-420 primary spaces in 2025-26.

C.60 In Colchester, there are longer term forecasted capacity issues relating to primary school reception places in the areas of Colchester north, Colchester southwest and Stanway, Wivenhoe and Colchester rural south. There is an identified expected short fall in secondary school Year 7 capacity in Colchester in 2023/24. However, there is no identified shortfall in the forecasted capacity for 2021/22 and 2022/23 as well as for all years forecasted after 2023/24. There is less forecasted secondary school Year 7 capacity in Thurstable with expected shortfalls in many of the upcoming reporting years up to 2030.

C.61 In Tendring, there are longer term forecasted capacity issues relating to primary school reception places in the areas of Little Clacton / Tendring / Thorpe / Weeley, Brightlingsea / Elmstead and Frinton / Walton. There is also an identified expected short fall in secondary school Year 7 capacity in Tendring

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in the areas of Clacton, Colne, Harwich and Manningtree and surroundings across many of the upcoming reporting years up to 2030

C.62 Educational achievement in Colchester Borough is generally good. 51.2% of pupils in Colchester achieved GCSEs which is higher the national average of 50.2% and the East of England average of 50.3% [\[See reference 72\]](#).

According to labour market statistics from January 2020 to December 2020 [\[See reference 73\]](#), Colchester has a lower-than-average proportion of people with NVQ1, NVQ2, NVQ3 and NVQ4 qualifications compared to the regional and national averages. Colchester also has fewer people with no qualifications (4.6%) compared to the regional (5.7%) and national averages (6.4%).

However, educational attainment is particularly poor in six LSOAs which are classified as being within the 10% most deprived under the Education, Skills and Training domain in the English Indices of Multiple Deprivation (Greenstead, St. Anne and St. John's, Shrub End, Berechurch). There are also an additional nine LSOAs within the 20% most deprived under the education deprivation domain [\[See reference 74\]](#).

Table C.17: Key Stage 4 – GCSE or equivalent [\[See reference 75\]](#)

	Average Attainment 8 score of all pupils	Percentage of pupils achieving grades 4 or above in English and mathematics GCSEs	Percentage of pupils achieving the English Baccalaureate (grades 4 or above in English and maths, A*-C in unreformed subjects)
Tendring	42.4	54.1%	10.6%
Colchester	49.4	69%	26.3%
Essex	47.7	67.9%	25.2%
East of England	49	69.7%	27%

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	Average Attainment 8 score of all pupils	Percentage of pupils achieving grades 4 or above in English and mathematics GCSEs	Percentage of pupils achieving the English Baccalaureate (grades 4 or above in English and maths, A*-C in unreformed subjects)
England	48.8	68.8%	26.8%

C.63 Regarding educational attainment, Colchester exceeds both the county and national averages in Average Attainment 8 score of all pupils, while closely aligning with regional scores (49.4, compared to 47.7, 49 and 48.8 for Essex, East of England and England respectively), Percentage of pupils achieving grades 4 or above in English and mathematics GCSEs (69%, compared to 67.9%, 69.7% and 68.8% for Essex, East of England and England respectively), and Percentage of pupils achieving the English Baccalaureate (26.3%, compared to 25.2%, 27% and 26.8% for Essex, East of England and England respectively).

C.64 However, Tendring consistently performs poorly compared to county, regional and national scores. The average attainment 8 score of all pupils in Tendring is 42.4, compared to 47.7, 49 and 48.8 for Essex, East of England and England respectively). The percentage of pupils achieving grades 4 or above in English and mathematics GCSEs in Tendring is 54.1%, compared to 67.9%, 69.7% and 68.8% for Essex, East of England and England respectively. Additionally, the percentage of pupils achieving the English Baccalaureate (grades 4 or above in English and maths, A*-C in unreformed subjects) in Tendring is 10.6%, compared to 25.2%, 27% and 26.8% for Essex, East of England and England respectively).

Table C.18: Adult qualifications [See reference 76]

	NVQ4 and above	NVQ3 and above	NVQ2 and above	NVQ1 and above	Other qualifications
Tendring	13,700	32,900	48,000	62,800	3,400
Tendring	18.3%	43.8%	63.9%	83.5%	4.5%
Colchester	43,400	67,900	89,000	99,700	7,000
Colchester	37.9%	59.3%	77.7%	87.0%	6.1%
East of England	34.9%	53.5%	72.4%	85.9%	6.5%
Great Britain	38.2%	56.9%	74.3%	85.3%	6.6%

C.65 The population of Tendring District has in general fewer qualifications than the overall sub-national and national populations. 83.5% of the working age population of Tendring District which accounts for 63,100 people are qualified to at least level 1 or higher compared to 85.3% across Great Britain. Colchester is higher than Tendring with 87% qualified to level 1 or higher. Colchester is above the regional and national average for the percentage of the population with qualifications at NVQ1 or higher. Level 1 represents foundation GNVQ, NVQ 1 or up to 5 GCSEs at grades A*-C.

C.66 The most significant difference is that Tendring has comparatively lower proportions of the population qualified at Level 3 and above than the regional and national averages, with 43.7% of the population having attained at least 2 or more A levels, advanced GNVQ, NVQ 3 or equivalent (level 3) and 18.2% achieving a higher national diploma, degree and higher degree level or equivalent (level 4).

C.67 Colchester however, is higher than the East of England and Great Britain at 59.3% with NVQ3 or above and 37.9% with NVQ4 or above.

Quality of Life

C.68 In June 2021, there was a total of 16,673 recorded crimes in Colchester Borough. In Tendring District, over the same period, there were 13,692 crimes recorded. This is also the highest number of total crimes recorded in the district [See reference 77].

C.69 Between April 2020 and March 2021, 22,558 crimes were recorded in the Colchester Borough [See reference 78]. In Essex, 154,561 crimes were committed in the year ending September 2021. Violent crime, anti-social behaviour, criminal damage and arson, public order, shoplifting, and other theft made up the highest proportion of recorded offences.

C.70 With an increasing population, it may be that the total number of recorded crimes will continue to rise. Planning can play a big part in kerbing this increase through developments that design out crime.

C.71 The Tendring community has access to a wide range of Council-run services including three leisure centres with swimming pools, sports centres, recreation grounds, country parks and the Princes Theatre, with an 820 seat auditorium which hosts local events as well as attracting national and international entertainers.

C.72 In Colchester, the community has access to a wide range of Council-run services and facilities, including those owned by the 31 Parish Councils in the Borough. Facilities include country parks at Cudmore Grove in East Mersea and High Woods in Colchester, a leisure centre including swimming pools and four multi-activity centres, a Sports Park and a 10,000 seat capacity football stadium.

C.73 Deprivation is measured on a small scale with local authorities divided in small areas known as Lower Super Output Areas (LSOAs) which have an average of 1,500 people, a minimum of 1,000 and are sub-divisions of wards. There are 32,482 LSOAs in England. Extent is the proportion of a local authority

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district's population living in the most deprived Local Super Output Areas (LSOAs) in the country. Local concentration refers to 'hot spots' of deprivation by reference to a percentage of the local authority districts population. Average Score is the population weighted average of the combined scores for the LSOAs in a local authority district and average Rank is the population weighted average of the combined ranks for the LSOAs in a local authority district.

C.74 Tendring ranks 1st in comparison to the 12 other Essex authorities in terms of average score, with Harlow, Basildon, and Colchester, following in rank as some of the more deprived Essex authorities [See reference 79]. Between 2015 and 2019 nine out of twelve lower tier local authorities in the Essex County Council administrative area increased in their rankings relative to 317 other local authority areas nationally whilst three areas (Tendring, Castle Point and Colchester) decreased their rank. Of the 326 local authorities within England, Tendring ranks within the top 25% for extent and the top 16% for the remaining three measures –local concentration, average score and average rank. Colchester is less deprived, with Colchester ranking 4th in Essex on average.

C.75 According to the English Indices of Multiple Deprivation 2019 [See reference 80], out of the 105 Lower-Layer Super Output Areas (LSOAs) [See reference 81] in the borough, 27 are within the top 40% most deprived LSOAs in the country. These LSOAs are largely concentrated in the wards of Berechurch, Greenstead, New Town & Christ Church, Old Heath & The Hythe and St Anne's & St John's. Colchester has one LSOA in the 10% most deprived in the country, namely Greenstead.

C.76 Colchester has 24 LSOAs that are in the 20% least deprived in England. The LSOA ranked as the least deprived is Bergholt in the ward of Lexden & Braiswick. Lexden & Braiswick, Mersea & Pyefleet, Tiptree and Wivenhoe all have three LSOAs which fall into the 20% least deprived classification.

C.77 Since the 2015 Indices of Multiple Deprivation, the number of LSOAs in the 10% most deprived has fallen to just one, with Barnhall, Salary Brook South and St Anne's Estate moving into the 11-20% most deprived decile.

C.78 The most deprived neighbourhood in England according to the IMD2019 is to the east of the Jaywick area of Clacton on Sea (Tendring 018a). This area was also ranked as the most deprived nationally according to the IMD2015 and IMD2010.

Health

C.79 In 2021, there were 2,031 live births in Colchester and 1,247 in Tendring. In Essex, only Basildon District had a higher number of births than Colchester (2,424). The total number of births in Essex in 2021 was 16,215 [See reference 82].

Life Expectancy and Health

Table C.19: Life expectancy [See reference 83]

Area	Males (2018-20)	Females (2018 - 20)
Tendring	78.2	82.0
Colchester	80.3	83.6
East of England	80.2	83.8
England	79.4	83.1

C.80 The health of people in Colchester is varied compared with the England average. According to the most recent Local Authority Health Profile for Colchester [See reference 84], life expectancy in the Borough is estimated at 80.3 years for men (which is higher than the England average but below the East of England average) and 83.6 years for women (which is higher than the England and regional averages).

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C.81 As outlined above, Colchester experiences pockets of deprivation. As a result, life expectancy is 8.6 years lower for men and 8.0 years lower for women in the most deprived areas of Colchester than in the least deprived areas. According to the Health Deprivation and Disability domain in the Indices of Multiple Deprivation, only 10 LSOAs in Colchester are within the 20% most deprived under this domain [See reference 85].

C.82 In 2017 the Colchester area had an all-ages mortality rate of 985.4 deaths per 100,000 residents, based on 1631 deaths recorded during that time period. This overall mortality rate was higher than the England average of 958.7 (per 100,000), but was a slight decrease compared the previous year (992.5 per 100,000).

C.83 The health of people in Tendring is generally worse than the England average. Tendring is one of the 20% most deprived districts/unitary authorities in England and about 24.1% (5,500) children live in low income families. Life expectancy for both men and women is lower than the England average. Life expectancy is 10.6 years lower for men and 7.8 years lower for women in the most deprived areas of Tendring than in the least deprived areas.

Table C.20: Estimated children in Year 6 classified as obese 2021/22 [See reference 86]

Administrative area	Children (year 6)
Tendring	24.3%
Colchester	19.7%
East of England	21.4%
England	23.4%

Impact of COVID-19

C.84 Between March 2020 and April 2021 there were 2,125 deaths registered in Colchester, 15.2% more than the 1,844 predicted . Of the deaths, 16.5% (352) had COVID-19 listed as the main cause. In Colchester, January had the highest number of excess deaths at 94 and January and February 2021 had the highest percentage of COVID related deaths at 4%.

C.85 The Middle Layer Super Output Area of New Town and Hythe saw the highest number percentage of excess deaths during the pandemic followed by Prettygate and Westlands. There were 96 deaths in total in New Town and Hythe, 68.4% (39) more than expected, with 16.7% of deaths (16) with COVID listed as the main cause. Central Colchester had the highest percentage of Covid related deaths at 25.3%, followed by Shrub End with 22.5%.

C.86 Lexden saw the lowest number percentage of excess deaths with saw 70 deaths, 15.7% fewer than expected, with 11.4% of deaths (8) attributed to Covid. Prettygate & Westlands had the lowest percentage of COVID related deaths at 10.6%, followed by both Abbey Field and Monkwick at 11.1%.

Physical Activity and Open Space

Table C.21: Adult participation in sport at least once a week

[See reference 87]

	Active people survey 7 – Oct 2013	Active people survey 8 – Oct 2014	Active people survey 9 – Oct 2015	Active people survey 10 – Sep 2016
Tendring	29.4%	29.4%	26.7%	23.6%

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	Active people survey 7 – Oct 2013	Active people survey 8 – Oct 2014	Active people survey 9 – Oct 2015	Active people survey 10 – Sep 2016
Colchester	35.2%	36.9%	36.8%	33.1%
Essex	36.8%	35.7%	34.8%	35.7%
East of England	35.9%	35.6%	35.6%	36.2%
England	36.6%	36.1%	35.8%	36.1%

C.87 The proportion of adults participating in sport at least once a week has decreased in the most recent survey for Tendring and Colchester, however at county, regional and national levels adult participation has increased. In Tendring District, 23.6% of those in the survey were active in sport between October 2015 and September 2016, a 3.1% reduction on the previous year. Colchester registered a 3.7% reduction in participation from Active People Survey 9 to Active People Survey 10.

C.88 Accessible Natural Greenspace Standard (ANGSt) created by Natural England sets out the minimum amount of accessible natural greenspace that any household should be within reach of. Analysis of Accessible Natural Greenspace Provision for Essex (2009) showed that only 7% of Essex households met all the ANGSt requirements while 14% didn't meet any. According to the report, "the areas that fare the worst according to the ANGSt criteria are the more rural parts of the county; although there may be greenspace surrounding rural inhabitants, there is often limited official public access beyond the footpath network".

C.89 Physical inactivity is classified as doing less than 30 minutes of moderate intensity activity per week. In Colchester, of adults aged over 19 years, 17.9% 23.5% and in Tendring were classified as being physically inactive in 2019/20. Colchester is lower than proportion of adults physically inactive across Essex (21.4%) and similar England (22.9%) and was the lowest level in the county.

The proportion of adult residents classified as physically active (doing more than 150 minutes of moderate intensity activity per week) was 72.6% in Colchester and 68.1% in Tendring (; Lowest: Basildon 58.4%). This was higher than the proportion of adults physically active across Essex as a whole (67.6%) and England (66.4%) In 2016/17 the area was also ranked as having the 7th highest percentage of residents involved in organised sports across the Essex Districts, with 35.1%. This was similar to the percentage across the whole of Essex (35%).

Natural and Built Environment

Overview

C.90 Colchester and Tendring lie within an ecologically rich rural and coastal environment. Areas of importance for nature conservation are to be found particularly along the coast and river estuaries. The Abberton Reservoir SPA, Blackwater Estuary Mid-Essex Coast SPA, Colne Estuary Mid-Essex Coast SPA, Hamford Water SPA and SAC, Stour and Orwell Estuaries SPA and Essex Estuaries SAC overlap with various parts of both Colchester and Tendring.

C.91 Within Colchester, there are eight Special Sites of Scientific Interest (SSSIs): Marks Tey Brickpit, Upper Colne Marshes, Roman River, Abberton Reservoir, Blackwater Estuary, Tiptree Heath, Bullock Wood and Cattawade Marshes. Dedham Vale is the only Area of Outstanding Natural Beauty within the area. There are ten SSSIs within Tendring. The majority of Sites of Special Scientific Interest (SSSIs) in the Borough are either in favourable or unfavourable recovering condition. Of the Tendring SSSI sites the majority are in a favourable condition with 36% measured as 'Unfavourable - Recovering' by Natural England.

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C.92 One aim of Colchester's Climate Emergency Action Plan is to plant 200,000 trees by 2024 as part of the Colchester Woodland and Biodiversity Project to benefit biodiversity and capture carbon [See reference 88]. There are areas of Ancient woodland scattered throughout both Colchester and Tendring.

C.93 Colchester has 22 Conservation Areas, 1,600 listed buildings and 40 scheduled monuments. CBC recently updated the Colchester Borough Local List which includes 780 buildings or assets that are of historical or architectural interest. Historic England's Heritage at Risk Register contains seven entries for the Borough. Tendring is in the process of preparing its Local List, but has over 1,000 listed buildings and three registered Historic Parks and Gardens. There are 13 entries on the Historic England's Heritage at Risk Register for the Tendring District. Designated heritage assets within the proposed garden community area would include Grade II listed Allen's Farmhouse, Ivy Cottage, Lamberts, and three buildings at Hill farmhouse. Designated heritage assets nearby include the grade I listed Church of St Anne and St Lawrence, grade II* listed Wivenhoe House, Elmstead Hall and Spring Valley Mill and numerous grade II listed buildings as well as the grade II listed Wivenhoe Registered Park and Garden [See reference 89].

C.94 The rurality of the wider area means that there are large areas of open countryside, including protected natural and historic landscapes. Areas of importance for nature conservation are to be found particularly along the coast and river estuaries.

C.95 In Colchester and the north west of Tendring District is the Dedham Vale Area of Outstanding Natural Beauty (AONB) covering an area of 90 sq. km, designated for conservation due to its significant landscape value. Made famous by the paintings of Constable and Gainsborough, its traditional grasslands, wildflower meadows and hedgerows provide an opportunity for both residents and visitors to enjoy the peace and beauty of what are among some of England's most precious and vulnerable landscapes. In addition, there are discussions currently underway regarding the possibility of expanding the Dedham Vale AONB westward into the northern part of Braintree District.

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Proposed by the Stour Valley Partnership, the proposals are supported by Essex County Council, Braintree District Council and Colchester Borough Council.

C.96 Natural England's National Character Area Profile: Northern Thames Basin, in which the Garden Community broadly lies, indicates that the rural urban fringe should be conserved and enhanced through the spatial planning process and through good design in development.

C.97 There are existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches. More broadly however, the topography of the land indicates benefits to the proposals in the form of integrating development into a natural context.

Agricultural Land

C.98 Grade 1 and 2 agricultural land is predominantly in the north east of Colchester Borough, with some areas of grade 2 land to the west and north west. The Garden Community site area is predominantly within Grade 1 Agricultural Land (determined 'excellent' by Natural England).

C.99 Tendring has a significant concentration of grade 1 and 2 agricultural land to the north west of the District on the border with Colchester Borough. The majority of the central party of the District is grade 3 land, with small areas of grade 2 running from south west to north east through the centre of Tendring. Coastal areas have lower quality land, with grade 4 land to the south around Colne Point and Holland-on-Sea and grade 4 and 5 land around Harwich and Dovercourt.

Utilities

C.100 Due to the nature and scale of Garden Communityties, utility provision is limited within the site currently. There is capacity in the medium pressure gas network in the region, but local low pressure upgrades will be required.

Existing Communities

C.101 A number of existing dwellings and the hamlet of Crockleford Heath exist within the broad area. The 'red-line boundary' of the site extends the Garden Community area towards Elmstead Market to the south east, Wivenhoe to the south, Ardleigh to the north and Colchester / Greenstead to the east, separated by the Salary Brook nature reserve and river channel.

Climate Change and Flood Risk

Overview

C.102 Colchester Borough Council declared a climate emergency on the 17 July 2019 and subsequently prepared a Climate Emergency Action Plan [See reference 90] for the period 2021 to 2030. Tendring District Council declared a climate emergency on 6 August 2019 and subsequently prepared a Climate Emergency Action Plan [See reference 91] for the period 2020 to 2023. The UK Climate Projections (UKCP18) show that in 2050 the climate in the South East will be warmer with wetter winters and drier summers than at present [See reference 92].

C.103 Tendring District Council's Cabinet agreed £150,000 of funding to pay for specialist advice for the action plan to be drawn up. A cross party climate change working group was set up to oversee the preparation of the action plan.

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The Council engaged the services of APSE Energy late in 2019 to help understand the position it is in and to calculate its own greenhouse gas emissions for the baseline year of 2018/19 along with collating data for the Tendring District as a whole. APSE Energy supplied the Council with a report in August 2020 that is used to underpin this Action Plan. One of APSE's recommendations is that the Council adopt the term net zero carbon as an aim rather than carbon neutral. The Essex Climate Action Commission (ECAC) was formed in 2020 to promote and guide climate action in the county, and move Essex to net zero by 2050. It is an independent, voluntary, and cross-party body bringing together groups from the public and private sector, as well as individuals from other organisations. The Commission published its report Net Zero: Making Essex Carbon Neutral in July 2021 and its recommendations are relevant to Essex County Council, Essex local authorities, parish and town councils, as well as Essex businesses, residents, and community groups. It covers a wide range of topic areas including land use, energy, waste, transport plus the built and natural environments.

C.104 The latest DECC figures [\[See reference 93\]](#) show generally decreasing trends for CO₂ emissions (kilotonnes) in Colchester from 2005 to 2020; however there was an increase in 2012. CO₂ emissions have fallen from 1,140kt to 812kt (a decrease of 29%) over the period between 2005 and 2020. In addition, the latest DECC figures for energy consumption [\[See reference 94\]](#) (in thousand tonnes of oil equivalent (ktoe)) show there has been a general decreasing trend in energy consumption as well as CO₂ emissions. The figures for Tendring illustrate similar trends with a fall in CO₂ emissions from 2005 – 2020 from 834kt to 619kt [\[See reference 95\]](#), equivalent to 26% reduction.

C.105 The risk of flooding posed to properties within the District and Borough arises from a number of different sources including river flooding, sewer and surface water flooding.

C.106 A hierarchy of flood zones are defined as:

- Zone 1 – (Low Probability)

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- Encompasses land assessed as having a less than 1 in 1000 annual probability of flooding in any year (<0.1%).
- Zone 2 – (Medium Probability)
 - Comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%).
- Zone 3a – (High Probability)
 - Covers land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) in any year.
- Zone 3b – (The Functional Floodplain)
 - This zone consists of land where water has to flow or be stored in times of flood. It is land which would flood with an annual probability of 1 in 20 (5%) or greater in any year.

C.107 Significant levels of flood risk are generally identified along river stretches. This is the case at the site's western boundary associated with Salary Brook. The surrounding area of Salary Brook includes land within Flood Risk Zones 2 and 3 although no development is proposed for this specific area. A water body also exists at the location of the former quarry at Allen's Farm with minor associated flood risk.

C.108 Surface water flooding can occur from sewers, drains, or groundwater and from runoff from land, small water courses and ditches as a result of heavy rainfall. Surface water flood risk is relatively high with all main settlements in North Essex assessed being ranked in the top 1,000 settlements most susceptible to surface water flooding.

Waste

C.109 Households within Tendring District Council and Colchester Borough Council produce much less household waste per person than the county average. However, a much smaller percentage of this household waste is

recycled, re-used or composted in Tendring than the Essex average. Almost half as much is reused, recycled or composted in Tendring compared with Essex as a whole. Colchester is also lower than the Essex value for this, but by a smaller percentage than Tendring.

C.110 The residual waste produced per household in Colchester in 2018/19 was 279kg, 281kg in 2019/20 and 307kg in 2020/21. The figure for Tendring in 2018/19 was 511kg, 404kg in 2019/20 and 428kg in 2020/21. The percentage of household waste reused, recycled and composted in Colchester was 58.6% in 2018/19, 58.7% in 2019/20 and 56.9% in 2020/21. The percentage of household waste reused, recycled and composted in Tendring was 27.3% in 2018/19, 35.1% in 2019/20 and 40.2% in 2020/21 [\[See reference 96\]](#).

Air, Water and Land Pollution

C.111 The 2022 Air Quality Annual Status Report [\[See reference 97\]](#) highlighted that the main source of air pollution in Colchester is road traffic emissions from major roads, notably the A12, A120, A133, A134, A1232, Brook Street and Mersea Road. It also reported that despite the reduced traffic movements, three air quality exceedances were identified in 2021. These were in the existing air pollution hotspots of Brook Street, Mersea Road and Osborne Street. In addition, there were no new developments that will have a significant impact on air quality in 2021. . The Tendring 2020 Air Quality Annual Status Report [\[See reference 98\]](#) concluded there have been no exceedances in the air quality objectives, though NO₂ concentrations continue to rise across the majority of monitoring locations. With high concentrations of NO₂ recorded at North Road junction, Clacton, Wellesley Road, Clacton and Old Road, Clacton.

C.112 All waterbodies in the Essex Combined Management Catchment and Anglian TraC Management Catchment are failing in terms of achieving good chemical status. The waterbodies in Colchester are of moderate ecological status, with the exception of Layer Brook which is of poor ecological status and Domsey Brook was of good ecological status in 2019. The Water Environment (Water Framework Directive) Regulations (2017) [\[See reference 99\]](#) require all

waterbodies to achieve 'good ecological status' and 'good chemical status' by 2027.

C.113 Currently, there are no entries on Colchester Borough Council's contaminated land register [See reference 100]. There are 24 sites on the Brownfield Register [See reference 101]. Tendring has 41 sites on the Brownfield Register and no entries on the contaminated land register.

Transport

Overview

C.114 Tendring District is connected to a network of major roads via the A120, A133 and A137, which provide routes to Chelmsford, London, the M25, London Stansted Airport and the Port of Felixstowe. Colchester is similarly connected to a comprehensive network of major roads via the A12 and A120, which provide routes to London, the M25, Harlow and Cambridge. Four sections of the A12 around Colchester fall into the top ten busiest sections on the A12 route. The Borough also lies in close proximity to the major seaports of Harwich (20 miles) and Stansted airport (30 miles). This strategic position has meant the area has been a magnet for growth resulting in a healthy and vibrant economy.

C.115 Transportation provision in Tendring includes 14 railway stations with connections to Colchester, Chelmsford, Ipswich, Norwich, Stratford and London. The average journey time between Clacton-on-Sea and London Liverpool Street is 1 hour 26 minutes. During 2014-2015 Abellio Greater Anglia invested £1.5 million to improve performance and service consistency across the network, £10,000 for customer-focussed service improvements and £300,000 to repair and upgrade rolling stock.

C.116 There are numerous bus routes throughout Tendring including frequent inter-urban routes linking villages to the larger urban areas of the District and to

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Colchester. The dispersed geography of the District means that these services are stretched and causes a reliance on the use of private cars. One of the challenges to future development in Tendring is to minimise the dominance of the car as a main mode of travel.

C.117 Transportation provision in Colchester includes six railway stations; bus routes operated by ten bus companies; and several cycle trails. One of the biggest challenges to Colchester's future development is traffic growth and the dominance of the car as the main mode of travel.

C.118 The growing demand for the use of airports, including London Stansted, will create additional associated pressures on road and rail infrastructure. The County Council, along with South East Local Enterprise Partnership, local and national agencies and other organisations, will also need to work collaboratively with the Local Planning Authorities to ensure infrastructure meets demand for enhanced economic growth.

C.119 The results of the Colchester Travel Diary survey (July 2007) found that the largest proportion of trips (55%) in the AM peak (0600-0900) are journeys to the workplace, followed by journeys to school (11%), the remainder of journeys are to shops / local services, leisure services and for business. Analysis of survey results also determined that 67% of these journeys to workplace in the AM peak originate from homes in urban areas and accordingly, could potentially be undertaken via public transport, walking or cycling instead. While the findings of the travel diary survey are now relative old, the findings from the more recent workplace travel plan surveys from organisations along the A134 (as show in the table below) confirm the view that workplace journeys are likely to be a significant contributor to congestion along this corridor.

Table C.22: Workplace Travel Plan survey findings [See reference 102]

	Colchester Council (2012)	Colchester Hospital (2012)	Colchester Institute (2013)	Culver Square (2010)
Drive (alone)	47%	64%	61%	64%
Car share	11%	9%	12%	0%
Get dropped off	3%	2%	N/A	N/A
Walk	13%	11%	10%	22%
Cycle	6%	4%	5%	7%
Bus	11%	5%	4%	0%
Train	6%	2%	2%	0%
Motorcycle	1%	0%	2%	7%
Taxi	1%	0%	N/A	0%
Work from home	2%	1%	1%	N/A
Other	0%	2%	3%	N/A

C.120 These results indicate that there is scope and opportunity for encouraging more modal shift for the journey to work, as car use is still high and many of these are relatively short journeys that could be undertaken by walking, cycling, bus or car sharing. The distances that staff travel to work is highlighted in the Travel Plan for Culver Square and reveal that 72% of staff live less than 4 miles (or a 30 minute cycle ride) from the Town Centre.

Modes and Flow of Travel

Table C.23: Private vehicle ownership [See reference 103]

	No car or van	1 car or van	2 cars or vans	3 cars or vans	4 or more cars or vans	Total cars or vans
Tendring	(23.4%)	(45.3%)	(23.2%)	(5.8%)	(2.2%)	74,212
Colchester	(20.6%)	(43.8%)	(27.4%)	(6.0%)	(2.3%)	90,741
East of England	(17.7%)	(41.1%)	(27.8%)	(6.6%)	(2.5%)	3,231,763
England	(25.8%)	(42.2%)	(24.7%)	(5.5%)	(1.9%)	25,696,833

C.121 Proportionately more households own 1 car or van within Tendring District at 45.3%, which is slightly higher than national and regional statistics, Colchester is also higher than the regional and national figures at 43.8%.

C.122 Colchester has one of the highest levels of walking and cycling in Essex and through creating the right infrastructure and interventions there is the opportunity to grow it further. Essex County Council’s Active Travel Essex project aims to support people in making those short journeys across the town in a safer easier way. The proposals for Colchester will see the creation of two routes helping safer, greener and healthier walking and cycling between key points in the town.

C.123 Travelling from north to south and east to west, the two routes cross in the town centre, enabling a safe and easy access from Lexden Road, Butt Road, East Hill and the Mile End area into the town centre or on to key destinations such as the station and hospital. These are journeys which are being made by car and, therefore, the proposals will, alongside other measures in the town (such as the proposed Rapid Transit System and future cycling and

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walking routes) help tackle congestion creating a safer, greener, healthier Colchester.

C.124 Tendring District has a lower proportion of residents driving to work by either car or van (34.50%) [See reference 104] when compared to regional and national levels, although this is only slightly lower than the national statistics. This could be lower as a result of a much higher number of people not currently working in the District. There is also a lower usage of trains as a mode of transport within the District compared to the national trend as well as fewer residents cycling or traveling by underground or on a bus, minibus or coach. The proportion of residents who walk to work is comparatively similar to the regional and national levels.

C.125 A much lower proportion of the population of Tendring drive to work in a car or van than in Colchester and the region. More people travel by train in Colchester than in the region and the nation and more people use buses, minicabs or coaches than in the East of England. Sustainable transport methods are more common in Colchester than in Tendring, the East of England or England as a whole, with 2.57% of residents cycling to work and 7.70% walking to work.

C.126 Commuting patterns result in a daily 1,882 population decrease in Colchester [See reference 105]. Around 24,850 people commute out of Colchester to other local authorities each day, most notably to Tendring, Braintree and the City of London. Around 17,412 people commute out of Tendring to other local authorities each day, most notably to Colchester, Braintree and the City of London. Inflow of people into Colchester (6,763). However, these commuting patterns are expected to have significantly changed due to the increase in working from home as a response to the COVID-19 pandemic

C.127 The baseline evidence suggests that the proportion of Tendring District's population with one car or van is higher than the national and county average and those residents that use rail for commuting is lower than average. The evidence also suggests that the proportion of residents that use other

sustainable modes such as walking and cycling is lower than the national average. Whilst it is considered that the rural nature of the district may have a key role to play in encouraging this, it is important that with the evolution of the plan further consideration is given to how future growth may be delivered to facilitate uplift in sustainable travel.

C.128 However, these commuting patterns are expected to have drastically changed from the increase in working from home as a response to the COVID-19 pandemic.

North Essex Garden Communities Movement and Access Study (2017)

C.129 The North Essex Garden Communities Movement and Access Study (2017) evaluates the current infrastructure capability within the Section One Strategic Area and identifies where there is likely to be issues with the quantum of development proposed in the Garden Communities. The key findings and recommendations for TCB are outlined below. Further work will be undertaken through masterplanning.

Main Garden Community - Early Phases

- A120-A133 Link Road to cater for construction traffic and to provide some relief of the A133 into Colchester.
- A133 Boulevard and cycle route build out linked to the provision of development in this area to provide a transformative public realm and environment for active modes and public transport prioritisation.
- Early phases of rapid transit priority measures, such as links between Elmstead Road and Greenstead Road for rapid transit
- Enhanced cycle links to Central Colchester.

- Potential provision of an eastern Park and Ride from an interim location by building a car park that can be repurposed for a future use as the town centre is built out and the Park and Ride relocated or another provided in the NE of the site. This could help to anchor demand for a high quality frequent rapid transit service from the early days of the new development.

Local Plan Period (By 2,500 Homes)

- Gradual Build out of rapid transit network infrastructure within the site and into Central Colchester.
- Delivery of Salary Brook Trail Upgrade and connections to Welshwood Park for access to schools and leisure in North Colchester.

Garden Village

- Link from Bromley Road to the A120-A133 Link Road junction (south of the A120) to remove internal car movements from within the site. Again, a focus is on the 'long way round' for cars, while providing more suitable construction traffic access.
- Consideration of access control point for peak periods to limit access to Bromley Road for travel into Central Colchester from the Garden Community / Garden Village thereby supporting a 'monitor and manage' approach prior to potential upgrade of the A137 / Bromley Road junction.
- Providing a variation of the rapid transit service from Colchester via the University that terminates at the Garden Village, supplementing services that currently use Bromley Road to Tendring and Colchester.
- There is a need for careful tie-ins to the highway network given presence of schools on St Johns Road, residential areas around Plains Farm Close.
- Our suggestion is a three segment development that has no through car route between all three (at peak periods at least through ANPR access control points), but with rapid transit and cycle accessibility at all times. This would help to spread the load on to the highway network, minimise

expenditure on junction capacity enhancements and supports sustainable / active modes as the default mode of choice.

- Provision of a rapid transit loop service up either Ipswich Road (or even Harwich Road) to serve the site and the neighbouring Betts Factory development site.
- Upgrades to existing PROW and greenway opportunities provides the opportunity for a continuous largely off road link between the Ipswich Road (connecting with existing and planned cycle routes), the University via Salary Brook, Garden Village and Garden Community.

North Essex Garden Communities Trip Generation

C.130 The North Essex Garden Communities Movement and Access Study provides projections for the likely volume of trips generated by the garden communities proposed development during peak travel times. This information is summarised in the below tables.

Table C.24: External vehicle trips per site (AM peak: 0800-0900)
 [See reference 106]

	Scenario	AM peak departures	PM peak arrivals
West Tendring / Colchester Borders	Local Plan – 2,500 homes (Ambitious), 2032	397	175
West Tendring / Colchester Borders	Local Plan – 2,500 homes (Census), 2032	635	293

Appendix C Baseline Evidence

	Scenario	AM peak departures	PM peak arrivals
West Tendring / Colchester Borders	Full – 10,700 homes (Ambitious), 2047	1444	605
West Tendring / Colchester Borders	Full – 10,700 homes (Census), 2047	2261	996

* Excludes external demand (arrivals) for mixed use and education (to be determined during masterplanning).

Table C.25: External vehicle trips per site (PM peak: 1700-1800)

	Scenario	AM peak departures	PM peak arrivals
West Tendring / Colchester Borders	Local Plan – 2,500 homes (Ambitious), 2032	198	263
West Tendring / Colchester Borders	Local Plan – 2,500 homes (Census), 2032	349	465
West Tendring / Colchester Borders	Full – 10,700 homes (Ambitious), 2047	698	973
West Tendring / Colchester Borders	Full – 10,700 homes (Census), 2047	1233	1721

* Excludes external demand (arrivals) for mixed use and education (to be determined during masterplanning).

Appendix C Baseline Evidence

C.131 The broad area is well located in terms of existing access and the presence of strategic roads and those that permeate the broad area and those eastern parts of Colchester.

C.132 The presence of the Great Eastern Mainline and rail links at Hythe exist as a rapid public transport link to Colchester.

C.133 The existing strategic and local bus networks currently set down and pick-up in close proximity to the site with a bus interchange located at the University campus. Within the Colchester Borough Council Local Plan, provision is made for a dedicated bus corridor to support development in North Colchester. Essex County Council were awarded HIF funding for a link road linking the A133 and A120 and Rapid Transit System (RTS).

Appendix D

Summary of SA Findings for the Draft DPD

D.1 This appendix presents the summary of sustainability findings for the policies included in the draft DPD. Table D.1 below sets out the summary of SA effects for the policies from the Draft DPD and Table D.2 below sets out the summary of cumulative effects for the Draft DPD.

Table D.1: Summary of SA effects for policies in the Draft DPD

SA Objective	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10	SA11	SA12	SA13	SA14	SA15
Key Vision Theme Nature	+	-	+	0	-	+	+	0	+	+	+	+	+	+	0
Key Vision Theme Movement and Connections	+	0	+	+	0	0	+	+	0	+	0	0	+	0	0
Key Vision Theme Community and Social Infrastructure	+	0	+	0	0	0	+	+	0	+	0	0	+	0	0
Key Vision Theme Buildings, places and character	+	+	0	0	0	0	0	0	0	+	0	0	0	+	0
Key Vision Theme Sustainable infrastructure	0	+	+	0	0	+	+	0	0	+	0	+	+	+	0
1: Land Uses and Spatial Approach	++	++	++/-	++	++	--/+	++/-	++	-	++	0	+/-	++/-	++/-	--
2: Development at the Garden Community	+	0	+	0	0	+?	+	+	+?	+?	+?	+	+?	+	+?
3: Nature	+	-	+	0	-	++	+	+	+	+	+	+	+	++	+

Appendix D Summary of SA Findings for the Draft DPD

SA Objective	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10	SA11	SA12	SA13	SA14	SA15
4: Buildings, Place and Character	+	++	+	+	+	+?	+	+	+?	0	+?	+?	0	+?	+/-
5: Economic Activity and Employment	0	+	+	++	++	-?	++	++	-?	0	-?	-?	+/-?	-?	-?
6: Community and Social Infrastructure	++	0	++	++	+	+?	++	++	+?	+?	0	0	+	+?	0
7: Movement and Connections	+	0	++	+	+	+?	++/-	++	+?	+	+?	+?	++/-	+?	-
8: Sustainable Infrastructure	+	0	+	0	0	0	0	+	0	++	++	0	+	0	+
9: Infrastructure Delivery and Impact Mitigation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Table 7.1: Summary of Likely Cumulative Effects for the DPD

SA Objective	Cumulative Effects for the DPD
1. Safety and community cohesion	++
2. Housing	++
3. Health	++
4. Vitality and viability of centres	++
5. Economy	++
6. Biodiversity and geological diversity	+/-
7. Sustainable travel	++/-
8. Services and infrastructure	++
9. Historic environment and townscape	-?
10. Energy efficiency and climate change	++
11. Water resources and quality	++?
12. Flood risk	+
13. Air quality	++/-
14. Landscape	+
15. Soils and minerals resources	--?

D.2 The changes to the SA scores made between the Draft DPD and Reg 19 DPD were minimal, comparing the tables above to those in Chapter 5 of this report there are only a few changes. These changes are set out below:

- Minor positive effects have now been documented for Key vision theme: buildings, places and character in relation to SA objective 5: economy as it now includes provision of employment opportunities.

Appendix D Summary of SA Findings for the Draft DPD

- Policy 1: Land uses and spatial approach now has a mixed effect in relation to SA objective 9: Historic Environment and townscape as it specifically sets out that land at Crockleford is being designated as the 'Crockleford Heath Area of Special Character' is to ensure development within this area considers the local character, heritage assets and their settings and the area's rural setting.
- Policy 8: Sustainable infrastructure is now expected to have minor positive effects against SA objectives 6: biodiversity and geodiversity and 12: flood risk because multifunctional green-blue infrastructure will be delivered across the Garden Community which has positive effects on climate change adaptation through flood risk management. Further to this, proposals must provide a diverse range of plant species that are resilient to climate change which would provide additional habitats for local wildlife.

D.3 As the updated SA findings relate to minor effects, overall none of the cumulative effects scoring has changed.

Appendix E

Audit Trail of Options Considered for the Reg 19 and Draft DPD

Audit trail of options considered for the Reg 19 DPD (Council's reasons for selecting preferred policy options in light of reasonable alternatives)

E.1 The majority of the Reg 19 DPD is unchanged from the Draft DPD version. As such, the only alternatives included below are the various refinements that were identified during the consultation of the draft DPD.

Policy/element of the Reg 19 DPD and proposed approach

E.2 Policy 1: Land Uses and Spatial Approach as included in the Prior + Partners Strategic Masterplan report (2023).

Reasonable alternatives

E.3 Three potential refinements to the masterplan options were identified during the Regulation 18 consultation process, as outlined below:

- Refinement A: 'Latimer/Lichfields' – focuses development south of the A133 to accommodate the expansion of the University of Essex. This option would allocate between 32.5 and 35.5 hectares to accommodate: student accommodation and support facilities, new sports facilities, and new sports pitches. Additionally, this option includes land for the knowledge-based employment also to be located south of the A133. This could potentially provide a more direct relationship between the Knowledge Gateway and the University of Essex and create an opportunity for the Rapid Transit System to better connect with the University campus.
- Refinement B: 'University of Essex' – this option would include: 12 to 15 hectares of student accommodation and support facilities, 3.5 hectares of new sports buildings/facilities, up to 17 hectares of new sports pitches and additional knowledge-based employment land. This option would allocate 13ha of knowledge-based employment land north of the A133. It is assumed that the 13ha would be allocated on the 15ha of land, which was shown in Option 3, Approach A of the Draft DPD as 'university expansion land' and 'knowledge-based employment'. The additional land proposed for student accommodation and sports pitches would take place on land south of the A133.
- Refinement C: 'Greenstead Councillors and Community' – focuses development directly north of the A133 and south of the A133 to accommodate the expansion of the University of Essex and Knowledge Gateway area. Additionally, this option includes land for the knowledge-based employment also to be located south of the A133. There is also proposed access into the new knowledge gateway area and university sports area.

Reasons for choosing the preferred policy option in light of the reasonable alternatives

E.4 The Councils consider the preferred option, which is a variation on the maximum landscape option, to be the most appropriate option when considered

against the reasonable alternatives and potential refinements. Whilst it requires a higher average density of new homes overall, it can still be accommodated with the flexibility to deliver different types of housing of different size, types, heights and densities to be delivered in different locations across the site. High densities respond to the climate emergency and maximise opportunities for sustainable travel in and around the rapid transit route and neighbourhood centres. This approach enables residential and employment development to be achieved without sprawling into the open countryside south of the A133 and east of the A120-A133 Link Road, while still providing for lower density development in more sensitive and peripheral areas, allowing space for a healthy network of open space and green infrastructure and to protect and respect the community and character of Crockleford Heath and other sensitive features of the site.

E.5 The preferred option allows employment opportunities to be delivered both on key strategic sites and within local centres and provides the means by which a Rapid Transit System can be routed through the three neighbourhoods of the Garden Community, separated from the link road and prioritised over private car access. The preferred option also ensures that the homes in the new community are not segregated by the new link road or the A133, and that there is space within the development to achieve the green and spacious approach that is key to the Councils' expectations of a Garden Community. The land south of the A133 will retain a substantial strategic green gap that respects the width of the coalescence break that was established through the Wivenhoe Neighbourhood Plan. This will provide a buffer to Wivenhoe that can incorporate planting and biodiversity net gain while still allowing land to facilitate the expansion of the University of Essex through new and replacement sports provision and that can serve the sport and recreational needs of the Garden Community and wider communities.

E.6 The preferred option responds positively to issues raised by residents and other stakeholders through the Regulation 18 public consultation – particularly in relation to protecting the sensitive slopes around Salary Brook; protecting Wivenhoe from coalescence while still facilitating University expansion to the south of the A133; and better recognising the characteristics of Crockleford

Heath and the need for a sensitive lower-density approach to development in that location.

E.7 In coming to a view on the preferred option, the Councils have had careful regard to representations received at Regulation 18 stage that offer different views on the way forward. These include the representations from a large number of residents concerned about coalescence and the impact of development on local character and local infrastructure; the representations from the University of Essex keen to ensure the Garden Community assists in maximising its potential for expansion and growth in jobs and students; and those from the lead developers anxious to ensure that development of the right number of homes can be achieved at an appropriate density within the constraints identified in the DPD. The Councils consider that the preferred option achieves the right balance between conflicting demands and is the most appropriate strategy having regard to environmental, social and economic effects.

Audit trail of options considered for the draft DPD (Council's reasons for selecting preferred policy options in light of reasonable alternatives)

E.8 Alternatives which would rely on existing national or local policy (i.e. in effect a 'do nothing' approach) have not been included below. The approach to the consideration of options which rely on existing policy has been described in **Chapter 4** of this report. In general where the Councils considered a 'do nothing' approach, it has been rejected given that the policy in the DPD represents an opportunity to add further detail to the policy requirements in the Section 1 Plan and include policy that will more directly address issues specific to the Garden Community.

E.9 Where the consultation questions included in the draft DPD has identified additional alternatives these have also been listed.

Policy/element of draft DPD and proposed approach

E.10 Key vision themes and principles and objectives.

Reasonable alternatives

E.11 No reasonable alternatives have been identified.

Policy/element of draft DPD and proposed approach

E.12 Policy 1: Land Uses and Spatial Approach (this aligns mostly directly with masterplan option 3 (maximum landscape) as included in the Prior + Partners masterplan report (2021).

Reasonable alternatives

- Masterplan option 1 (maximum development area): a strategy that includes development on a wider area of land of the agreed 'broad area of search', including land south of the A133 and to the east of the new link road allowing for a lower overall density of development.
- Masterplan option 2 (maximum connectivity): a strategy that confines the majority of development to land north of the A133 and to the west of the new link road, but which delivers a higher average density of development

with a reasonable level open space and green infrastructure integrated into the development.

- Masterplan option 3 (maximum landscape): a strategy that prioritises a fully retained landscape setting to the east and south of the new community and confines development to land north of the A133, but would deliver a range of residential densities, a rapid transit route and a range of economic clusters in the north, east and south.
- Masterplan option 3a (alternative approach to maximum landscape) provides development at the new Garden Community in broadly the same distribution as option 3. However, through option 3a land is provided to the south of the A133 and East of the main existing campus for university expansion. This land could accommodate academic and other university related uses. It could also allow for expansion of sports pitches and recreation in close proximity to existing related facilities on campus. This alternative would still result in the majority of the land south of the A133 and within the area of search being retained as a green buffer to neighbouring settlements. Knowledge based employment uses would be provided north of the A133. Under this option these could potentially be extended westwards to provide a more direct relationship and link to the Knowledge Gateway. The approach could also deliver a mix of uses to the north of the A133, with the land becoming part of the Garden Community neighbourhoods.

Reason for choosing the preferred policy option in light of the reasonable alternatives

E.13 The Councils consider the preferred option, which is the maximum landscape option, to be the most appropriate option when considered against the reasonable alternatives. Whilst it requires a higher average density of new homes overall, it can still be accommodated with the flexibility to deliver different types of housing of different size, types, heights and densities to be delivered in different locations across the site. High densities respond to the climate emergency and maximise opportunities for sustainable travel. This approach

enables the development to be achieved without sprawling into the open countryside south of the A133 and east of the A120-A133 Link Road, whilst still providing space for a healthy network of open space and green infrastructure and to protect and respect the community and character of Crockleford Heath and other sensitive features of the site.

E.14 The preferred option allows employment opportunities to be delivered both on key strategic sites and within local centres and provides the means by which a Rapid Transit System can be routed through the three neighbourhoods of the Garden Community, separated from the link road and prioritised over private car access. The preferred option also ensures that the new community is not segregated by the new link road or the A133, and that there is space within the development to achieve the green and spacious approach that is key to the Councils' expectations of a Garden Community.

Policy/element of draft DPD and proposed approach

E.15 Policy 2: Requirements for all New Development.

Reasonable alternatives

E.16 No reasonable alternatives have been identified.

Policy/element of draft DPD and proposed approach

E.17 Policy 3: Nature.

Reasonable alternatives

- A more prescriptive policy, which lists exactly what biodiversity mitigation and net gain and SuDS requirements are required and where.
- The consultation questions included in the draft DPD also highlighted the potential for a lower or higher biodiversity net gain and tree canopy cover target to be included in the document.

Reason for choosing the preferred policy option in light of the reasonable alternatives

E.18 The preferred policy for Nature has been selected as it sets out the approach for the Garden Community to protect existing green infrastructure and enhance the green infrastructure network for the benefit of people and wildlife. It includes a range of topics: green infrastructure, integrating green and blue spaces into built form, protection of biodiversity and biodiversity net gain, tree planting, productive landscapes, SuDS and blue infrastructure, integration of A120-A133 Link Road mitigation, and the expectations for studies to support planning applications.

E.19 The Councils have rejected a more prescriptive approach to biodiversity mitigation and net gain and SuDS requirements as there is a need for flexibility to ensure that proposals for the Garden Community are able to respond to changes to the natural environment over the lifetime of the Garden Community and changes in regard to biodiversity net gain, protected species, priority habitats and SuDS features.

E.20 A target of 10% increase in canopy cover has been selected in preference to a higher or lower target. A target of an increase rather than an overall coverage figure will lead to an increase in canopy cover. The 10% increase reflects the target in Colchester's Section 2 Local Plan, which will ensure consistency of application across the borough. Whilst trees are important for numerous reasons (e.g. amenity, health and wellbeing, carbon capture,

biodiversity) there are other green infrastructure types that are important to include within the Garden Community. A higher target could affect the ability to deliver other types of green infrastructure.

E.21 The Environment Act has received Royal Assent and a minimum target of 10% biodiversity net gain will be mandatory once secondary legislation is passed. Many local authorities are already requiring a minimum of 10% biodiversity net gain and this target is included in Colchester's Section 2 Local Plan.

Policy/element of draft DPD and proposed approach

E.22 Policy 4: Buildings place and character.

Reasonable alternatives

E.23 A more detailed and prescriptive approach including a detailed Masterplan and Design Code and very detailed requirements and standards.

Reason for choosing the preferred policy option in light of the reasonable alternatives

E.24 The Councils states that a disadvantage of a more detailed and prescriptive approach of including the maximum level of detail in this Plan, is that, over the lifetime of the Garden Community development and even in the short-term running up to the first phases of development, expectations could change, and flexibility is required. For example, the housing market and the need and demands for certain kinds of homes will change over time and it would be better for the mix of housing to be determined by the most up to date

evidence, than by a prescriptive requirement set out in this Plan that become detached from reality over a period of time.

E.25 The Councils have rejected the option of setting different targets for housing types as at this stage the mix of housing that will be required is unknown. The need for housing types is also likely to change over time, given that the Garden Community will be built out over c. 30-40 years. The target of 30% affordable housing is set on the Section 1 Local Plan. Requirements for other types of housing will either be included in design codes or justified as part of future planning applications supported by a Housing Strategy.

E.26 Policy 4 expects all dwellings to comply with the government's latest 'Technical housing standards – nationally prescribed standard' as a minimum. The Councils have selected this option as to achieve high quality design it is important that minimum space standards are achieved. The Councils have rejected the use of alternative space standards as following the government's latest technical housing standards is clear to all developers what is required. It also ensures that if standards change in the future, the Plan will require these and remain up to date.

E.27 The draft policy is therefore considered to be the best option as it strikes a realistic balance between establishing minimum standards and expectations from the outset and requiring additional work in the form of Masterplans, Design Codes and Strategies to determine a greater level detail going forward, based on the most up to date information available – whilst still retaining an appropriate level of control.

Policy/element of draft DPD and proposed approach

E.28 Policy 5: Economic Activity and Employment.

Reasonable alternatives

E.29 No reasonable alternatives for this policy have been identified.

Policy/element of draft DPD and proposed approach

E.30 Policy 6: Community and social infrastructure.

Reasonable alternatives

E.31 No reasonable alternatives for this policy have been identified.

E.32 Policy/element of draft DPD and proposed approach

E.33 Policy 7: Movement and connections.

Reasonable alternatives

- A less comprehensive policy but with further detail provided in design codes.
- The consultation questions included in the draft DPD also highlighted the potential for the Garden Community Parking Standards to be incorporated into the policy.

Reason for choosing the preferred policy option in light of the reasonable alternatives

E.34 The Movement and Connections policy is comprehensive and covers a wide range of transportation issues, including feedback from engagement. It is split into sections on vision and design approach; active and healthy travel; public transport; parking; travel demand management; A120/A133 Link Road connectivity; monitoring, management and delivery; and planning application requirements. Many of these sections have sub-sections and the policy provides detailed requirements for each issue. The policy was written in close collaboration with Essex County Council as the highway and transportation authority and reflects their comments. The Councils have rejected, at this stage, the approach of having a less comprehensive policy but with further detail provided in design code. There is a need to ensure the full range of movement and connectivity requirements for the Garden Community are comprehensively detailed at this early stage.

Policy/element of draft DPD and proposed approach

E.35 Policy 8: Sustainable Infrastructure.

Reasonable alternatives

E.36 No reasonable alternatives for this policy have been identified.

Policy/element of draft DPD and proposed approach

E.37 Policy 9: Infrastructure delivery and impact mitigation.

Reasonable alternatives

E.38 No reasonable alternatives for this policy have been identified.

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