



North Essex Authorities – Common Strategic Part 1 for Local Plans

Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA)

Environmental Report – Preferred Options

June 2016

Strategic Part 1 - Sustainability Appraisal: Preferred Options (June 2016)

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Glossary of Acronyms

ALC Agricultural Land Classification

ATLAS Advisory Team for Large Applications

BDC Braintree District Council

CA Conservation Area

CBC Colchester Borough Council

DPD Development Plan Document

EC European Community

ECC Essex County Council

EEC European Economic Community

EU European Union

HMA Housing Market Area

I&O Issues and Options

LB Listed Building

LPA Local Planning Authority

LNR Local Nature Reserve

LUC Land Use Consultants

LoWS Local Wildlife Sites

MSA Minerals Safeguarding Area

NPPF National Planning Policy Framework

OAN Objectively Assessed Need

PDL Previously Developed Land

PO Preferred Options

PPG Planning Policy Guidance

SA Sustainability Appraisal

SA/SEA Sustainability Appraisal incorporating the Strategic Environmental Assessment

SCI Statement of Community Involvement

SEA Strategic Environmental Assessment

SHLAA Strategic Housing Land Availability Assessment

SHMA Strategic Housing Market Assessment

SM Scheduled Monument

SPA Special protection Area

SPD Supplementary Planning Document

SSSI Site of Special Scientific Interest

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TDC Tendring District Council

TCPA Town and Country Planning Association

UDC Uttlesford District Council

WRC Water Recycling Centre (previously Waste Water Treatment Works)

1 Introduction

1.1 Background

Braintree District Council, Colchester Borough Council and Tendring District Council, together forming the 'North Essex Authorities,' in conjunction with Essex County Council as a key partner in its strategic role for infrastructure and service provision, commissioned Place Services of Essex County Council to undertake an independent Sustainability Appraisal (SA) for a Common Strategic Part 1 for Local Plans.

Place Services are acting as consultants for this work; therefore the content of this SA should not be interpreted or otherwise represented as the formal view of Essex County Council.

1.2 Common Strategic Part 1 for Local Plans

In Essex as elsewhere, the influences of population and economic growth do not stop at administrative boundaries. Settlement patterns, migration flows, commuting and strategic infrastructure needs all have significant influences within and between local authority areas.

Local Plans are the main vehicle for conveying an area's growth requirements and how these will be accommodated. However, individual local authority boundaries cannot encapsulate the geographies of issues that transcend those boundaries. Through active and on-going collaboration the authorities can plan, manage and review strategic objectives for the effective implementation of sustainable development and enhanced environments.

Consequently, the neighbouring authorities of Braintree, Colchester and Tendring have agreed to come together through a shared desire to promote sustainable growth; and the particular need to articulate the strategic priorities within the wider area and how these will be addressed. Central to this is the effective delivery of planned strategic growth, particularly housing and employment development, with the necessary supporting infrastructure. Chelmsford City Council is also within the Housing Market Area (HMA), and in preparation of its Local Plan will incorporate the relevant content of the strategic and cross-boundary policies into its Local Plan.

The Common Strategic Part 1 for the independent Local Plans of Braintree District, Colchester Borough and Tendring District Councils ensures constructive engagement between these authorities in meeting the Duty to Co-operate requirements of the Localism Act (2011) and the National Planning Policy Framework (NPPF, 2012). The geographic and functional relationship between the authorities' areas is also demonstrated by the fact that together they form the majority of a single Housing Market Area (HMA) for planning purposes.

The Common Strategic Part 1 for Local Plans is intended to form part of each of the authorities' separate Local Plan, with the main purpose of covering the strategic Local Plan requirements of:

- Articulating a spatial portrait of the area, including its main settlements and strategic infrastructure, as a framework for accommodating future planned growth;
- Setting out the numbers of additional homes and jobs across the area that will be needed covering the plan period;
- Providing a strategic vision for how planned growth in north Essex will be realised;
- Setting strategic objectives and policies for key growth topics; and
- Highlighting the key strategic growth locations across the area and the necessary new or

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upgraded infrastructure to support this growth.

The Local Plan for each authority will correspond to 'Part 2' in each instance.

2 Sustainability Appraisal / Strategic Environmental Assessment

2.1 The Requirement for Sustainability Appraisal

The requirement for Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) emanates from a high level national and international commitment to sustainable development. The most commonly used definition of sustainable development is that drawn up by the World Trade Commission on Environment and Development in 1987 which states that sustainable development is:

'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

This definition is consistent with the themes of the NPPF, which draws upon The UK Sustainable Development Strategy Securing the Future's five 'guiding principles' of sustainable development: living within the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly.

SEA originates from the European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" (the 'SEA Directive') which came into force in 2001. It seeks to increase the level of protection for the environment; integrate environmental considerations into the preparation and adoption of plans and programmes; and promote sustainable development.

The Directive was transposed into English legislation in 2004 by the Environmental Assessment of Plans and Programmes Regulations (the 'SEA Regulation') which requires an SEA to be carried out for plans or programmes,

'subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and required by legislative, regulatory or administrative provisions'.

This includes Local Plans. The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the plan or programme on issues such as 'biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors' as specified in Annex 1(f) of the Directive.

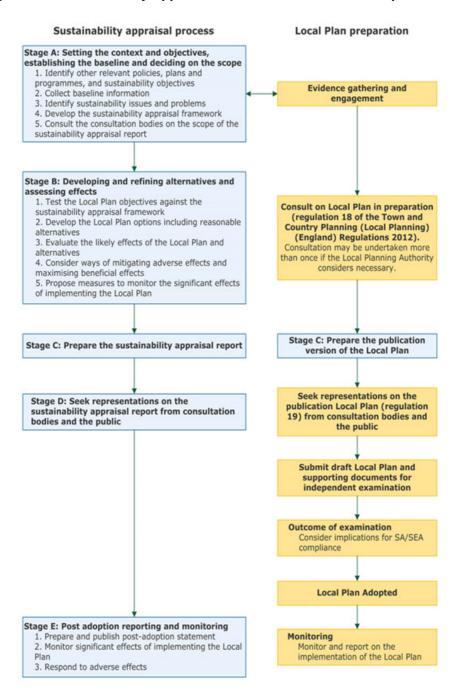
SA examines the effects of proposed plans and programmes in a wider context, taking into account economic, social and environmental considerations in order to promote sustainable development. It is mandatory for Local Plans to undergo a Sustainability Appraisal in accordance with the Planning and Compulsory Purchase Act 2004 as amended by the Planning Act 2008, and in accordance with paragraph 165 of the NPPF.

Whilst the requirements to produce a SA and SEA are distinct, Government guidance considers that it is possible to satisfy the two requirements through a single approach providing that the requirements of the SEA Directive are met. This integrated appraisal process will hereafter be referred to as SA.

2.2 The Sustainability Appraisal Process

The SA of the Common Strategic Part 1 for Local Plans follows that of the Sustainability Appraisal process as iterated in National Planning Practice Guidance on Sustainability Appraisal requirements for local plans. The following 5 sequential stages are documented below.

Figure 1: Stages in the Sustainability Appraisal Process and Local Plan Preparation



Source: Planning Practice Guidance – Sustainability appraisal requirements for local plans (Paragraph: 013 Reference ID: 11-013-20140306 Revision date: 06 03 2014)

2.3 The Aim and Structure of this Report

At the current stage, this report most closely responds to Stage B in the SA process above; developing strategic options including reasonable alternatives, evaluating the likely effects of the strategic options and alternatives, and considering ways of mitigating adverse effects and maximising beneficial effects.

Whilst the production of a Sustainability Appraisal (Environmental) Report is not a statutory requirement at this stage, this SA Report has been produced to accompany Braintree District, Colchester Borough and Tendring District Council's Local Plans - Preferred Options consultation for iterative processes and to ensure that sustainability themes are factored into the authorities' decision making.

3 Local Plan Progress of the Relevant Authorities

3.1 Braintree District Council Local Plan

Braintree District Council are undertaking an 8 week public consultation on a Draft Local Plan (Preferred Options stage) in June, to which this SA report relates.

Previously, the Council consulted on a Local Plan Issues and Scoping Report in January – March 2015. Relevant to the scope of the Common Strategic Part 1 for Local Plans, the Local Plan Issues and Scoping Report highlighted the following key issues:

- Large numbers of new homes are required in the District to support the growing population;
- The District may not have enough brownfield sites (those where buildings have previously been located) to accommodate the new homes that need to be provided; and
- The Council must balance new homes with protection of the natural and historic environment.

This document highlighted the need to demonstrate that the new Plan can achieve and maintain a supply of readily available development sites for new homes, meeting a much higher target than in the past. Regarding this, and in response to the above key issues, it looked at a number of options, including:

- Focusing new homes in the existing towns and larger villages;
- Building new homes in one or more new villages;
- Dispersing new homes between all areas of the District;
- Building new homes in areas where they can provide funding for major infrastructure projects such as new roads; and
- Building new homes on the existing public transport/rail network to encourage sustainable travel.

3.2 Colchester Borough Council

Consultation on a Draft Local Plan, outlining the Council's preferred options for growth in the Borough is scheduled to commence in July 2016, to which this SA also relates.

The Council consulted on an Issues and Options Local Plan in early 2015. This document included key issues regarding:

- Development of realistic housing targets for both market and affordable housing.
- Allocation of new housing sites in the most sustainable locations.
- Integrating new housing into the community by getting the right densities and character appropriate to the Borough's diverse neighbourhoods ranging from the Town Centre.
- Building housing of different types and sizes to cater for the full range of ages and needs, with particular regard to the needs of specific groups including students, families, people with disabilities, ethnic minorities such as gypsies and travellers, and older residents.
- Addressing the issue of supporting people who want to build their own homes.
- Achieving high quality sustainable housing design with policies that strike a balance

between ensuring quality through standards and supporting innovation through a flexible approach.

- Seeking to ensure, in addressing all of the issues above, that the end result is the creation of high quality, sustainable places.
- Ensuring the delivery of well-located sites to support employment with particular regard to growing sectors of the economy.
- Development of policies to support new investment and help existing businesses overcome barriers to success and to help train new workers.
- Ensuring there is sufficient land across the plan period to support housing growth
- Development of a retail hierarchy which safeguards the pre-eminence of the Town Centre while supporting appropriate levels of growth in other areas.
- Review of existing Town Centre boundary, primary shopping area and primary shopping frontages.
- Development of policies for the Town Centre that help to create a balanced mix of activities in the daytime, evening and night time.
- Development of policies which support tourism, leisure, culture and the arts.

The responses to this consultation have been collated and analysed. The Council has been collecting evidence and commissioning studies which has informed the new Local Plan's evidence base. For example evidence has been gathered through a 'Call for Sites' exercise whereby the Council invited proposals for new uses of land in the Borough for potential inclusion in the new Local Plan. In addition these sites have been assessed thoroughly in a Strategic Land Availability Assessment, which explored the suitability, availability and achievability of all land use proposals proposed in the Borough.

3.3 Tendring District Council

The District Council intends to provide the public with a chance to make representations on a Preferred Options Local Plan in July 2016, in line with their Statement of Community Involvement (SCI) and through best practice in plan-making. This consultation ensures that the plan-making process is transparent and is informed to also ensure the best possible outcomes for the District.

Tendring District Council consulted on an Issues and Options Local Plan in 2015. Representing the first stage in the plan-making process, this involved the LPA exploring 'issues and options' across the District in order to develop spatial strategy selection and scenarios surrounding growth. The key issues emanating from and included within the Issues and Options covered needs to:

- Plan for the right number of new homes, of the right size, type and tenure to be built and in the right locations for current and future generations
- Meet the challenges presented by a lack of brownfield land
- Build homes to boost the economy by building more homes and increasing the population in the right locations to boost the demand for goods and services, unlock land for businesses and deliver new infrastructure
- Support growth locations and prioritising economic development projects
- Target growth sectors and promote sectors of the economy with greatest potential for

significant growth in the future

- Improve knowledge and skills through working with businesses, schools and colleges to provide the training and work experience the residents need to address shortages in skills
- Support existing businesses through working closely with existing businesses, supporting them to expand and diversify

The development of 'issues and options', and their subsequent SA, ensures that the LPA is making every effort to meet housing needs. The Issues and Options Local Plan 2015 looked at broad locations for growth.

In addition, a number of additional growth options or scenarios have been developed alongside additional options for the distribution of growth in different areas of the District as can be considered reasonable. These are in consideration of available land as put forward for allocation in a call-for-sites exercise that ran concurrently with the Issues and Options consultation.

The identification of these options responded to the requirement to meet the full objectively assessed need over the plan period, particularly in light of the criticisms of the previous Local Plan that was halted in 2014, and the options were considered to be extensive, definitive and reasonable for exploration at that stage.

4 Sustainability Context, Baseline and Objectives

4.1 Introduction

The following section outlines the key findings of the three authorities' Local Plan Scoping Reports which includes an outline of the plans and programmes, the baseline information profile for the area.

4.2 Plans and Programmes (Stage A1)

Local Plans, including the Common Strategic Part 1 for Local Plans, must have regard to existing policies, plans and programmes at national and regional levels and strengthen and support other local plans and strategies. It is therefore important to identify and review those policies, plans and programmes and Sustainability Objectives which are likely to influence the Common Strategic Part 1 for Local Plans at an early stage. The content of these plans and programmes can also assist in the identification of any conflicting content of plans and programmes in accumulation with the Common Strategic Part 1 for Local Plans. Local supporting documents have also been included within this list as they will significantly shape policies and decisions in the three authority area.

It is recognised that no list of plans or programmes can be definitive and as a result this report describes only the key documents which influence the Plan. Table 1 outlines the key documents, whilst a comprehensive description of these documents together with their relevance to the Plan is provided within Annex A.

Table 1: Key Documents

ľ	International	Plane and I	Programmes
			Mayal Call I I I I I I I I I I I I I I I I I I

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.

European Landscape Convention (Florence, 2002)

European Union Water Framework Directive 2000

European Union Nitrates Directive 1991

European Union Noise Directive 2002

European Union Floods Directive 2007

European Union Air Quality Directive 2008 (2008/50/EC) and previous directives (96/62/EC; 99/30/EC; 2000/69/EC & 2002/3/EC)

European Union Directive on the Conservation of Wild Birds 2009

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

European Community Biodiversity Strategy to 2020

United Nations Kyoto Protocol

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

The World Summit on Sustainable Development Johannesburg Summit 2002

Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations).

The Conservation of Habitats and Species Regulations, 2010

Review of the European Sustainable Development Strategy (2009)

Environment 2010: Our Future, Our Choice (2003)

SEA Directive 2001

The Industrial Emissions Directive 2010

Energy Performance of Buildings Directive 2010 on the energy performance of buildings 2010/31/EU

The Drinking Water Directive 1998

The Packaging and Packaging Waste Directive 1994

EU Seventh Environmental Action Plan (2002-2012)

European Spatial Development Perspective (1999)

European Convention on the Protection of the Archaeological Heritage (Valletta, 1992)

Aarhus Convention (1998)

National Plans and Programmes

National Planning Practice Guidance (2016)

The Localism Act 2011

National Planning Policy Framework (March 2012)

The Future of Transport White Paper 2004

Housing Act (2004)

Building a Greener Future: Policy Statement (July 2007)

Community Infrastructure Levy Guidance (April 2013)

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Underground, Under Threat - Groundwater protection: policy and practice (GP3) Model Procedures for the Management of Land Contamination - Contaminated Land Report 11 (September 2004) Natural Environment and Rural Communities Act 2006 Countryside and Rights of Way Act 2000 Planning and Compulsory Purchase Act 2004 The Education (School Information) (England) (Amendments) Regulations, 2002 Childcare Act, 2006 Flood & Water Management Act 2009 The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007) Safeguarding Our Soils: A Strategy for England (2009) Natural Environment White Paper: The Natural Choice: Securing the Value of Nature (2011) The National Adaptation Programme – Making the Country Resilient to a Changing Climate (2013) Planning Policy for Traveller Sites (2012) National Planning Policy for Waste (2014) Adapting to Climate Change: Ensuring Progress in Key Sectors (2013) DECC National Energy Policy Statement EN1 (2011) DCLG: An Introduction to Neighbourhood Planning (2012) JNCC/Defra UK Post-2010 Biodiversity Framework (2012) Mainstreaming Sustainable Development (2011) UK Marine Policy Statement, HM Government (2011) Electricity Market Reform White Paper 2011 Water White Paper (2011) Urban White Paper (2000) Rural White Paper (2000)

DfT (2013) Door to Door: A strategy for improving sustainable transport integration

DCLG (2011) Laying the Foundations: A Housing Strategy for England

DEFRA (2011) Securing the Future: Delivering UK Sustainable Development Strategy

Department of Health (2010) Healthy Lives, Healthy People: our Strategy for public health in England

DECC (2011) UK Renewable Energy Roadmap (updates setting out progress and changes to the strategy dated 2013 and 2013)

Community Energy Strategy (DECC, 2014)

The National Flood and Coastal Erosion Risk Management Strategy for England (Environment Agency, 2011)

Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy (HM Government, 2013)

Future Water: The Government's Water Strategy for England (DEFRA, 2008)

Water for People and the Environment: Water Resources Strategy for England and Wales (Environment Agency, 2009)

Safeguarding our Soils: A Strategy for England (DEFRA, 2009)

The Code for Sustainable Homes: Setting the standard in sustainability for new homes (DCLG, 2008)

Sub-national Plans and Programmes

Essex and Southend Replacement Structure Plan – Saved Policy Direction (2001)

Essex Gypsy and Traveller and Travelling Showpeople Accommodation Assessment – on behalf of EPOA (July 2014)

Looking Back, Moving Forward - Assessing the Housing Needs of Gypsies and Travellers in Essex (2006)

Greater Essex Demographic Forecasts Phases 1 & 2 & 3 (2012)

Essex Transport Strategy: the Local Transport Plan for Essex (2011)

2011 Essex Biodiversity Action Plan

Commissioning School Places in Essex 2015-2020

Essex County Council Joint Municipal Waste Management Strategy 2007-2032

River Basin Management Plan Anglian River Basin District (draft 2015)

Essex Wildlife Trust Living Landscape plans

Essex Wildlife Trust Living Landscape Statements

Essex Rural Strategy: 2020 Vision for Rural Essex 2010

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ECC Parking Standards: Design and Good Practice Adopted by UDC (September 2009)

The Essex Local Area Agreement – 'Health and Opportunity for the People of Essex' 2008 – 2011 (2010 Refresh)

ECC Development Management Policies (February 2011)

The Essex Strategy 2008 - 2018

Sustainable Drainage Systems Design and Adoption Guide 2012

Essex Minerals Local Plan (2014)

Essex Replacement Waste Local Plan (submitted June 2016)

Haven Gateway: Programme of Development: A framework for Growth, 2008 – 2017 (2007)

Haven Gateway: Integrated Development Plan (2008)

South East LEP Investment and Funding (March/April 2014)

Anglian Water Business Plan (2015-2020) (2012)

Draft Water Resource Management Plan (2014-2039) (2014)

River Basin Management Plan (2014/2015) (2009)

Combined Essex Catchment Abstraction Management Plan (2013)

Haven Gateway Water Cycle Study: Stage 1 and 2 Reports (2008)

South East LEP Growth Deal and Strategic Economic Plan (2004)

ECC Developer's Guide to Infrastructure Contributions (Revised Edition 2016)

ECC Corporate Plan 2013-2017

Vision for Essex 2013-2017: Where Innovation Brings Prosperity (2013)

Corporate Outcomes Framework 2014-2018 Essex County Council (2014)

Colchester Draft Surface Water Management Plan (2014)

A12/A120 Route Based Strategy (2013)

Highway Authority's Development Management Policies (2011)

Economic Plan for Essex (2014)

Combined Essex Catchment Abstraction Management Strategy (2013)

Essex Design Guide (2005)

North Essex Catchment Flood Management Plan (2009)

Essex and South Suffolk Shoreline Management Plan (second phase) (2011)

Dedham Vale AONB and Stour Valley Management Plan 2010 - 2015

Essex Transport Strategy: The Local Transport Plan for Essex (June 2011)

Local Plans and Programmes

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Landscape Character Assessment (Chris Blandford Associates, September 2006)

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Colchester Coastal Protection Belt Review (Chris Blandford's Associates 2016)

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Creative Colchester Strategy & Action Plan (2012)

Safer Colchester Partnership: Strategic Assessment of Crime and Annual Partnership Plan 2012-2013 (2012)

CBC Townscape Character Assessment (2006)

CBC Scott Wilson Strategic Flood Risk Assessment (2008)

CBC Affordable Housing SPD (2011)

CBC Communities Facilities SPD (updated 2012)

CBC Better Town Centre SPD (2012)

CBC Sustainable Design and Construction SPD (2011)

Colchester Borough Council Housing Strategy (2012)

CBC Local Air Quality Management Progress Report (2013)

Colchester Environmental Strategy 2014-2019 draft (2014)

Colchester Borough Council's Comprehensive Climate Risk Assessment (2010)

Colchester Borough Council Landscape Strategy (2013)

Colchester Cycling Strategy SPD (2012)

CBC Core Strategy (2008)

CBC Development Policies DPD (2010)

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Climatic Change Strategy 2010-2016, Tendring District Council

Tendring Economic Strategy (October 2013)

Retail Study Update (September 2010)

4.3 Baseline Information (Stage A2)

Annex B details the complete Baseline Information profile for the strategic area relevant to the content of the Common Strategic Part 1 for Local Plans.

The following section outlines a summary of the key baseline information and therefore the current state of the environment for the three authorities' strategic area.

4.3.1 Economy

- Compared to sub-national and national figures, Tendring district has experienced a lower start up rate and a lower de-registration rate of businesses indicating a slightly less robust local economy. Braintree and Colchester are more in line with the county and national business registration and de-registration rates.
- Further to this, Tendring District is predominantly rural in nature; however the majority of businesses are located in an urban location. The majority of businesses in Colchester are in urban areas. This difference is in line with county and national business compositions which recorded highest proportions within urban areas. There is a wider need to provide more employment opportunities in rural locations.
- A total of 68.6% of the working population in Tendring District are in employment which is lower than sub-national and national employment levels. Contrastingly, Braintree and Colchester are above the regional and national percentages for residents in employment. The proportion of Tendring District's working population who are economically active but unemployed is 5.4% which is above Braintree and Colchester as well as sub-national and national unemployment figures.
- Despite this, unemployment is in decline in Tendring, Braintree and Colchester. In Tendring unemployment has decreased by 4.8% since April 2012-March 2013, in Colchester unemployment has fallen by 3.7% since January 2004 and in Braintree unemployment has fallen by 2.9% since April 2012 March 2013.
- As of 2013, 60.1% of jobs within Tendring, 66.2% of jobs within Braintree and 59.9% of jobs within Colchester were classed as full-time. Tendring and Colchester are lower than the trends in working patterns found in Essex, but Braintree is higher than the county. Tendring, Braintree and Colchester all have a lower percentage of full-time jobs than Great Britain as a whole.
- The majority of jobs within Tendring and across all areas are major group 1-3. For Tendring this accounts for 32.2% of all employee jobs, in Braintree it is 35.3% and Colchester is 39.2%. Despite this, the proportion of people in these employment groups for all areas is lower than the regional and national figures. The other industry in the district which provides a higher proportion of employee jobs compared to the sub-national and national equivalent is major group 6-7, consisting of services industries and sales and accounting for 28.4% of employees in Tendring. Braintree has higher levels of employees in major group 4-5 than the regional and national averages and Colchester also has slightly higher levels of

employees in this major group.

4.3.2 Housing

- The latest population trend data shows that the population in the HMA area is growing annually.
- In 2014/15, 3.8% of the net dwelling completions, which accounts for 10 dwellings, were affordable within Tendring, as opposed to 73.9% in Braintree and 40.0% in Colchester. This data indicates that affordable housing is an issue, particularly in Tendring and to a lesser extent, in Colchester.
- The average dwelling price within Tendring District is £168,829. This is significantly lower
 than the county and national averages. The average dwelling prices for Essex is similar to
 the national average, but Tendring District is much lower. Braintree has a higher average
 dwelling price than Tendring and Colchester at £215,851, but is still lower than the county
 and national average.
- The composition of dwelling stock for Tendring, Braintree 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 91.3% as well as a smaller proportion of Local Authority owned dwellings compared with Colchester, Essex and England at 4.7%. 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. Braintree has 0.0% local authority owned dwellings in the District.
- Meeting the housing needs in the Districts and Borough is an important issue. The updated SHMA for Braintree, Colchester, Chelmsford and Tendring Councils 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 Districts and Boroughs is 2 and 3 bedroom dwellings.
- Tendring has seen no increase in Gypsy and Traveller provisions since January 2014. Caravan counts in Braintree have increased since January 2014, but with fluctuations in measuring periods between 2014 and 2016 due to not tolerated sites being removed from the statistics, presumably due to eviction or inclusion in the statistics for tolerated sites. A similar trend is apparent in Colchester, with an overall increase in sites for Gypsy and Traveller populations.

4.3.3 Biodiversity

- Ramsar sites are wetlands of international importance designated under the Ramsar Convention which have a high degree of protection. They often incorporate Special Protection Areas (SPAs) and Special Areas for Conservation (SACs). In the Plan Area there are a number of Ramsar sites which include Hamford Water, and parts of the Colne and Blackwater estuaries which include coastal areas, estuaries, rivers and lakes/reservoirs. These Ramsar sites are also SPAs.
- SACs are sites of international importance designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive).

There is 1 SAC in the area: a large coastal area known as Essex Estuaries stretching from Shoeburyness to Jaywick Sands.

- There are a number of National Nature Reserves located in the Plan Area: Blackwater Estuary, Colne Estuary, Dengie and Hamford Water.
- Tendring is also home to the Stour, Orwell and Colne Estuaries and Hamford Water, SPA and Ramsar sites, designated for the conservation and protection of the habitats of migratory and endangered birds, scarce plants and invertebrates and for the conservation of wetlands and are sites of national and international importance. There are no Ramsar sites, Special Protection Areas (SPAs) Special Areas of Conservation (SACs), or candidate Special Areas of Conservation (cSACs) in Braintree District. In Colchester, the Blackwater Estuary, Colne Estuary and Abberton Reservoir are designated as Ramsar sites and Special Protection Areas (SPAs) with international protection.
- All 15 SSSIs in Tendring and all 8 sites in Colchester are meeting the target of at least 95% of the SSSI area being brought into favourable condition. 3 of the 4 SSSIs in Braintree are meeting the target, but Bovingdon Hall Woods is at 93.30% favourable or unfavourable recovering. Colne Estuary in Tendring and Colchester, Stour Estuary in Tendring, Bovingdon Hall in Braintree and Blackwater Estuary in Colchester are the only SSSIs and not meeting the PSA target for 100% of their area, however the area not in a favourable or favourable recovering condition is small.

4.3.4 Landscapes

- Within the area's landscape there are many areas of special interest which have been designated and protected from inappropriate development. The main areas of importance are Landscape Character Areas (LCAs), an Area of Outstanding Natural Beauty (AONB), Protected Lanes and Special Verges.
- The Essex Landscape Character Assessment (Chris Blandford Associates, 2003) is based on the Countryside Agency's guidance, and establishes a 'baseline' of the existing character of the Essex landscape. The assessment involved a broad review of the landscape identifying 'Landscape Character Areas' within Essex. They are areas with a recognisable pattern of landscape characteristics, both physical and experiential, that combine to create a distinct sense of place.
- Protected lanes have significant historic and landscape values. They generally originate from pre-historic track ways, which have been in continual (if lighter) use since. Protected lanes are often narrow, sunken and enclosed by a combination of mixed deciduous hedges and mature trees, ditches and raised verges that can be indications of great age. The volume weights and speed of traffic is often limited to preserve the special character and due to their age and use they also have great biological value. Protected Lanes and onstatutory assets, however hold some weight in planning decisions. Braintree District Council include consideration of Protected Lanes and Colchester Borough Council have emerging evidence base on the matter.
- 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. Proposed by the Stour Valley Partnership, the proposals are supported by Essex County Council, Braintree District Council and Colchester Borough Council.

- 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.
- 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. Land to the south of the borough is lower quality, the majority of which is grade 3 with some areas of grade 4 and 5 along the banks of the river Colne and Abberton reservoir.
- Braintree predominantly features grade 2 agricultural land across the majority of the District, with areas of grade 3 land throughout. Some more concentrations of grade 3 land are notable towards the north of the District. There is an area of poor quality grade 5 land to the east of Stisted and Braintree town.

4.3.5 Population and Social

- The area's population has been projected to increase (ONS, 2014) to 2021. Some of the highest increases in populations county-wide are forecast to be in Colchester Borough and Tendring District.
- When compared to regional and national figures the area has a similar percentage of the population who are of working age. This is despite the area having a slightly larger percentage population of over 65 than regionally and nationally and also a smaller proportion of people aged 16-24.
- The population in Tendring, Braintree and Colchester are all predicted to increase over Local Plan Periods, with the highest growth rates in Colchester, followed by Tendring and Braintree. The population structure in Colchester is more weighted towards 20-44 year olds, similar to the trends in Braintree but with less dominance in this age group. Contrastingly, Tendring has a higher population of people aged over 65. This age group is also predicted to increase over Local Plan periods.
- In Braintree District, the level of demand for secondary school places in Year 7 is predicted to rise over the course of the next 5 years. In Colchester, pressure on primary school places is forecast to continue in line with considerable housing development in the area. In the Stanway area in particular new housing developments are progressing and there is likely to be more pressure on school places, which will be monitored closely.
- Secondary school Year 7 intakes in Colchester are forecast to rise significantly from September 2017 onwards and options are being explored in active collaboration with the schools in Colchester town to provide the additional places required.

- Pupil numbers across Clacton secondary schools are predicted to decline over the next 3 years. However, the level of demand for Year 7 places is forecast to increase significantly from 2018/19 onwards once pupils from new housing are included within forecasts, and this situation will be closely monitored. Pupil numbers across the other secondary schools / academies in the district are forecast to remain relatively stable over the course of the next 5 years. The impact of new housing in the locality of these schools will be closely monitored to ensure that there are sufficient school places available to meet any increase in demand.
- Tendring on average has lower proportions of students achieving KS4 results across all
 measures when compared with Braintree and Colchester. This trend extends to adult
 qualifications, where Braintree and Colchester are above regional and national averages for
 adults with NVQ1 level qualifications or higher. In general, Tendring has a less educated
 population than Braintree, Colchester, the sub region and nation.
- Tendring has the highest level of deprivation for a local authority within Greater Essex. 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. Braintree and Colchester are less deprived, with Colchester ranking 6th in
 Essex on average and Braintree less deprived ranking 8th in Essex on average.
- Life expectancy of residents within Tendring District is lower than the regional and national averages with men living for an average of 78.7 years and women on average living 82.0 years. Braintree and Colchester have higher life expectancies for men and women than the national figures, but are both below the regional figures. In general, life expectancy is increasing within the Districts and nationwide. Colchester has the highest life expectancies of the three Districts for women, at 83.5 and Braintree has the highest for men at 80.1. The implications of this will mean that as people live longer there will be increased pressure on services and housing for the elderly.
- Tendring has a higher proportion of claimants of incapacity benefit or severe disability allowance than Braintree, Colchester, the region and the nation. The majority of claimants across all Districts and Borough are aged 50+, but a higher percentage of people aged 25-49 claimed in Braintree than Tendring and Colchester.
- Participation in sport has seen a reduction in Tendring and Colchester from the previous year, and Braintree also has reduced overall since 2012-13 despite a small increase in the previous year. In addition, obesity in Tendring is more prevalent than Braintree, Colchester, the region and the nation. Braintree also has a higher proportion of adults classified as obese but a lower proportion of children aged 4-5. Colchester has lower percentages of both adults and children aged 4-5 classified as obese.

4.3.6 Air Quality and Noise

- There are no Air Quality Management Areas (AQMAs) located in Braintree District. The
 main air quality issues in the District relate to nitrogen dioxide (NO2) and particulate
 emissions from vehicles travelling on the A12 and A120.
- There are no AMQAs within Tendring District.
- There are four Air Quality Management Areas in Colchester, located in the following areas:
- Area 1 Central Corridors (including High Street Colchester; Head Street; North Hill; Queen

Street; St. Botolph's Street; St. Botolph's Circus; Osborne Street; Magdalen Street; Military Road; Mersea Road; Brook Street; and East Street).

- Area 2 East Street and the adjoining lower end of Ipswich Road.
- Area 3 Harwich Road/St Andrew's Avenue junction.
- Area 4 Lucy Lane North, Stanway; Mersea Road; and Brook Street.
- The Tendring District Council Air Quality Progress Report shows that Tendring District is currently meeting the air quality objectives. The automatic data does show there is a risk of exceeding the nitrogen dioxide objective at the Clacton Town Hall site; however this site experienced low data capture due to networking problems.

4.3.7 Climatic Factors

- Tendring District, Colchester Borough and Braintree District all consume more energy from non-renewable sources as a percentage of their consumption compared to the East of England as a whole. More than three quarters of Tendring and Braintree District's 2,532.2GWh and 3,019.1GWh respective energy consumption is from petroleum products and natural gas. For Colchester, the percentage is just below 75% for the same energy sources. Colchester and Braintree are closer to the East of England average than Tendring. Registering 38.27% of their consumption deriving from petroleum, Tendring is lower than the percentage for Braintree, Colchester and the East of England. In contrast only 20.6GWh of energy consumed is from renewable bioenergy and waste sources, equating to just 0.81% of energy consumption in Tendring. This is comparatively low when measured against the 0.94% in Braintree and 1.01% achieved across the East of England region, but higher than the 0.71% achieved in Colchester.
- Industry, domestic and transport each produce roughly 1/3 of the total CO2 emissions within Colchester, however there is more variation in the statistics for Tendring and Braintree. The industry and commercial sector produces the smallest amount in every District at 28.8% for Tendring, 29.7% in Braintree and 31.6% in Colchester. Transport produces the most in Braintree at 37.4%, whereas domestic emissions are the highest in Tendring and Colchester at 41.6% and 34.8% respectively.
- Tendring has one of the lowest reductions in CO2 emissions relative to the 2005 data of all the Districts in Essex at just 11.5%. This is 6.1% below the average reduction per capita for Essex. Braintree and Colchester are higher than the Essex average at 18.7% and 18.6% respectively.

4.3.8 Transport

- The area is largely rural, whilst also being the site of a key international gateway at Harwich.
- There are network efficiency issues on a number of strategic inter-urban routes which are operating at or near to capacity. In addition, the capacity of the A12 is further constrained by the operation of the junctions and sub-standard slip roads. The A12, managed by Highways England, has recognised issues with poor reliability and delays, and the Roads Investment Strategy (2015 2020) seeks to implement major improvements to address these issues. The A120 between Braintree and the A12 junction suffers from heavy

- congestion, high accident risk and poor journey reliability. ECC is leading a project, with Highways England, to study options for dualling this section of the route. A number of key junctions on the local highway network also operate at 'over capacity' during peak hours.
- 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% and Braintree has the lowest proportion of households owning 1 or more car at 40.3%.
- Tendring and Colchester are above the regional and national averages for households owning 1 or more cars, in contrast with Braintree which is lower. Despite this, a lower proportion of people use a private car or van to travel to work. Similarly, Colchester has fewer employees travelling to work by car or van, which could be as a result of a higher number of employment opportunities closer to their homes negating the need for travel by car. The same reasoning applies to Braintree, where more employment opportunities are in rural locations and more people travel to work by car or van.
- All Districts and Boroughs registered significant proportions of residents travelling outside to
 other local authority areas to find employment. Just 59.9% of residents in Braintree
 remained in the District for their work, which was the lowest percentage of the Districts and
 Boroughs. Tendring was the next highest, followed by Colchester with the lowest
 proportion of residents travelling elsewhere for employment.

4.3.9 Water

- The main rivers in the area are the Colne and the Pant/Blackwater. The north of the area
 has relatively high contamination vulnerability because of the porosity of the underlying
 chalk.
- In addition to natural water bodies there are various artificial water bodies in the county. Abberton is one of the County's largest inland water resources.
- Water management is challenging in the Strategic Area given the combination of high development growth and it being one of the driest counties in England. Annual rainfall in the area is only 65% of the average in England and Wales. In respect of water quantity a significant portion of the resource is considered to be 'water stressed; the resource availability status of rivers and aquifers show that they are generally over abstracted; and not self-sufficient in relation to local sources of water supply and needs to import substantial quantities of water to satisfy existing demand.
- The latest Colchester Water Cycle Study identified issues with a number of smaller ward areas within the Borough. These are:
- North Colchester Wastewater treatment and Wastewater Infrastructure
- Colchester Town Centre and Fringe Wastewater Treatment and Wastewater Infrastructure
- South Colchester (Garrison) Wastewater Treatment and Wastewater Infrastructure
- East Colchester Wastewater Treatment and Wastewater Infrastructure
- Stanway Wastewater Treatment and Wastewater Infrastructure
- Colchester other areas Wastewater Treatment

- Wivenhoe/Rowhedge Wastewater Treatment and Wastewater Infrastructure
- Tiptree Water Supply Resources, Wastewater Infrastructure and more recently Environment – Water Quality
- West Mersea Wastewater Infrastructure
- Marks Tey Wastewater Treatment and Environment Water Quality
- Other Villages Eight Ash Green (EAG) and Langenhoe Wastewater Treatment EAG
- The key activities required to resolve the "red" time periods above are:
- Water Supply Implementation of proposed transfer of water from Planning Zone 56 -Colchester to Planning Zone 63 - Tiptree
- Wastewater Implement proposed discharge consent increases and process improvements at Colchester STW and Copford STW. Upgrade/extension of existing sewers or implementation of new sewer
- Water Quality Implementation of BAT technologies, and therefore significant investment, to keep pollution levels within consent.
- The latest Tendring Water Cycle Study identified issues with a number of smaller wards within the District. These are:
- Jaywick Wastewater Treatment and Wastewater Infrastructure
- Frinton-on-Sea and Walton-on-the-Naze Wastewater Infrastructure
- Brightlingsea Wastewater Infrastructure
- Lawford, Manningtree and Mistley Wastewater Infrastructure
- Thorpe le Soken Wastewater Infrastructure
- St Osyth Wastewater Infrastructure
- The key activities required to resolve the "red" time periods above are:
- Wastewater Detailed review of development and discharges to establish the required increase in the consented DWF for Jaywick STW, and apply if necessary.
- Extension and upgrade/capacity increase of current sewer network.
- In Braintree, the latest Water Cycle Study concludes that potable water may require an upgrade, but that potable water supply can support the predicted growth in the District. A stage 2 report explores the possibility of reducing water demand through dwelling design. Additional Wastewater Treatment Works (now Water Recycling Centres) and Sewerage Networks may be required as environmental water quality is highlighted as a cause for concern, but again there is confidence that existing treatment facilities can support the additional wastewater.

4.3.10 Flooding

 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.

- Surface water flood risk is relatively high with all main settlements assessed being ranked in the top 1,000 settlements most susceptible to surface water flooding.
- Significant levels of flood risk have been identified along the Essex coast and inland along river stretches.

4.3.11 Cultural Heritage and Townscape

- The historic environment should be effectively protected and valued for its own sake, as an
 irreplaceable record which contributes to our understanding of both the present and the
 past.
- There is a concentration of listed buildings in the district of Braintree and also around historic towns such as Colchester.
- Archaeological deposits across Tendring, Braintree and Colchester range in date from the Palaeolithic, through to structures related to the Cold War. However, it should also be remembered that the EHER records represent only the known deposits with many new sites being identified each year. Archaeological sites (and their setting) constitute a finite, non-renewable resource which is vulnerable to damage. There is a need for updated Historic Characterisation Studies within the Districts and Borough to provide a more accurate description of the archaeological deposits in order to better understand the vulnerability of the historic environment.
- According to the Heritage at Risk Register (2016), there are 15 assets listed as being at risk in Tendring. This consists of 7 Scheduled Monuments, 4 Listed Buildings and 4
 Conservation Areas. There are 7 assets listed as being at risk in Braintree. This consists of 3 Scheduled Monuments, 2 listed places of worship and 2 Conservation Areas. There are 10 assets listed as being at risk in Colchester. This consists of 4 Scheduled Monuments, 2 listed places of worship, 1 Listed Building and 3 Conservation Areas.
- Colchester Borough boasts 52 Scheduled Monuments, which is the highest number when compared with Braintree and Tendring. Braintree District contains 40 Scheduled Monuments and Tendring District benefits from 27 Scheduled Monuments which include above and below ground features.
- There are 3 Registered Parks and Gardens within Tendring District, 8 Registered Parks and Gardens within Braintree District and 4 Registered Parks and Gardens within Colchester Borough which have each been designated by English Heritage as being "a park or garden of special historic interest".
- Braintree has the most Conservation Areas of the 3 authorities with 37. Both Tendring and Colchester have 22 Conservation Areas which are defined as historical settlements and buildings having 'special architectural or historical interest, the character of which is desirable to preserve or enhance'.

4.3.12 Minerals and Waste

The Strategic Area has extensive deposits of sand and gravel. The sand and gravel
resources in Essex are significant in national, sub-national and local terms - Essex is one of
the largest producers in the UK; most geographically extensive and significantly mixed
within the centre and north of Essex – namely the districts of Uttlesford, Braintree,

Chelmsford, Colchester and Tendring.

- The Replacement Waste Local Plan (submitted June 2016), as published by Essex County Council and Southend-on-Sea as the combined Waste Planning Authority, allocates 4 sites within Tendring, 1 in Braintree and 2 within Colchester for the treatmenmt of biological waste, inert waste, inert landfill and other waste management. These are:
- Tendring
- Morses Lane, Brightlingsea
- Sloughs Farm, Ardleigh
- Sunnymead, Elmstead & Heath Farms
- Wivenhoe Quarry Plant area
- Braintree
- Rivenhall
- Colchester
- Bellhouse Landfill Site
- Fingringhoe Quarry
- Three sites within Braintree District have been identified as preferred or reserved sites for primary mineral extraction of sand and gravel in the Essex Minerals Plan (Policy P1, Table 5), which was adopted in July 2014. These include sites at Bradwell Quarry (Rivenhall Airfield) comprising Site No's A3 A7; one site at Broadfield Farm, Rayne (Site No A9); and one site on land at Colemans Farm (Site No A46).
- There are two sites within Tendring identified as preferred or reserved for primary mineral extraction of sand and gravel. These are Site Nos A20 – Sunnymead, Alresford and B1 – Slough Farm, Ardleigh.
- There is one site within Colchester identified as preferred or reserved for primary mineral extraction of sand and gravel. This is Site No A13 Colchester Quarry, Fiveways.
- The majority of the sand and gravel produced in Essex (about 78%) is used within the County itself. This position looks unlikely to change over the long-term. Consequently the main factor influencing production of sand and gravel in the future will be the need to meet the minerals demand for the whole of Essex created by major development and new infrastructure projects within Essex itself.
- The silica sand resources in Essex are processed for industrial purposes at Ardleigh from a mixed resource, north-east of Colchester. Industrial uses include glassmaking, foundry casting, ceramics, chemicals and water filtration

4.3.13 Data Limitations

Not all the relevant information was available for the each authority in the Strategic Area on a comparable basis, or at the relevant level; as a result there are some gaps within the data set. It is believed however that the available information shows a comprehensive view on sustainability within the Strategic Area. New data that becomes available will be incorporated in the SA.

It should be noted that while the baseline will be continually updated throughout the SA process,

the information outlined within this report represents a snapshot of the information available at the beginning of June 2016.

4.4 Key Sustainability Issues and Problems and Sustainability Objectives (Stage A3)

The outcome of Stages A1 – A2 in the SA Process is the identification of key sustainability issues and problems facing the Strategic Area which assist in the finalisation of a set of relevant Sustainability Objectives. Issues are also identified from the review of plans and programmes and a strategic analysis of the baseline information.

Sustainability Objectives are also drawn from an amalgamation of the SA Scoping Report of each authority's Local Plan in order to align the separate SAs of both the Common Strategic Part 1 for Local Plans and individual Local Plans (representing Part 2 in each authority).

The appraisal of the Common Strategic Part 1 for Local Plans will be able to evaluate, in a clear and consistent manner, the nature and degree of impact and whether significant effects are likely to emerge from the Common Strategic Part 1 for Local Plan's proposed content. The alignment between the Sustainability Objectives in this SA with the Objectives of each authority's separate Local Plan SA will ensure an integrated approach between strategic issues and those that are local and specific to each authority.

The following table outlines the stages which led to the formulation of the Sustainability Objectives for the Common Strategic Part 1 for Local Plans, which were based on key sustainability issues and considerations for the whole Strategic Area.

Table 2: Key Sustainability Issues and Problems

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)	
Social integration Quality of life	Some of the highest increases in populations county-wide are forecast to be in Colchester Borough and Tendring District and there is a need to integrate new communities with existing ones. Tendring has the highest level of	The absence of a strategic approach across the HMA is likely to lead to the allocation of development across the area that can be considered comparatively more	Create safe environments which improve quality of life, community cohesion	
Quality of the	deprivation for a local authority within Greater Essex.	piecemeal and not of the scale to stimulate wider infrastructure benefits, and ancillary development requirements, that can be of wider benefit to new and existing communities.		
Population growth	The latest population trend data shows that the population in the HMA area is growing annually.	Without a strategic approach within the HMA, it is probable that each authority	2) To ensure that everyone has the opportunity to live in	

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)
	The area's population has been projected to increase (ONS, 2014) to 2021. Some of the highest increases in populations county-wide are forecast to be in Colchester Borough and Tendring District.	would have to explore the allocation of marginal and less sustainable land that does not offer the wider benefits of Garden Communities.	a decent, safe home which meets their needs at a price they can afford
The need for specific housing types	There is an identified need for more starter homes and housing for older people.	As indicated by need, market forces alone can not be expected to deliver all types of housing need in the HMA. The exploration of Spatial Strategy and Garden Community options across the strategic area enables sustainable growth to be well dispersed in reflection of needs and most importantly ensures the delivery of such housing through adhering to Garden City Principles.	
Affordable housing	In 2014/15, 3.8% of the net dwelling completions, which accounts for 10 dwellings, were affordable within Tendring, as opposed to 73.9% in Braintree and 40.0% in Colchester. This data indicates that affordable housing is an issue, particularly in Tendring and to a lesser extent, in Colchester.	The scale of cross-boundary Garden Communities, explored through the Strategic Part 1 for Local Plans are such that affordable housing delivery and units for older people can significantly increase. It	
Ageing population	The population structure in Colchester is more weighted towards 20-44 year olds, similar to the trends in Braintree but with less dominance in this age group. Contrastingly, Tendring has a higher population of people aged over 65. This age group is also predicted to increase over Local Plan periods.	is also a Garden City Principle and requirement of such strategic development. In the absence of the Strategic Part 1 for Local Plans, there is a possibility that a higher proportion of smaller sites are allocated for development in Local Plans, which would not provide such significant increases in affordable housing and housing for	

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)
		older people.	
Gypsy and Traveller requirements	Tendring has seen no increase in Gypsy and Traveller provisions since January 2014. Caravan counts in Braintree have increased since January 2014, but with fluctuations in measuring periods between 2014 and 2016 due to unauthorised sites being removed from the statistics, presumably due to eviction or inclusion in the statistics for tolerated sites. A similar trend is apparent in Colchester.	Garden Communities, as explored in the Common Strategic Part 1 for Local Plans have the capability, and are likely to provide adequate Gypsy and Traveller provision, located in sustainable areas, that is unlikely to otherwise be forthcoming from call-forsites processes.	
Healthcare services	Health services in the Strategic Area are either underprovided or otherwise oversubscribed. Life expectancy of residents within Tendring District is lower than the regional and national averages with men living for an average of 78.7 years and women on average living 82.0 years. Braintree and Colchester have higher life expectancies for men and women than the national figures, but are both below the regional figures.	In exploring options for strategic level growth, Garden Communities have the opportunity to integrate adequate health service and recreation provision into the settlement, or can otherwise ensure that accessibility to healthcare facilities is improved. In the absence of this approach, it is likely that	3) To improve the health of the District's residents and mitigate/reduce potential health inequalities
Participation in sport and obesity	Participation in sport has seen a reduction in Tendring and Colchester, and Braintree also has reduced overall since 2012-13. In addition, obesity in Tendring is more prevalent than Braintree, Colchester, the region and the nation.	current trends will continue and negative implications be exacerbated.	
Business start ups	Compared to sub-national and national figures, Tendring district has experienced a lower start up rate and a lower deregistration rate of businesses indicating a slightly less robust local economy. Braintree and Colchester are more in line with the county and national business registration and de-registration rates.	The link between homes and jobs, is a key tenet of sustainability, as is ensuring progressive growth in employment opportunities across a range of sectors. This is best addressed at a strategic level, and the	4) To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)	
Rural employment	Tendring District is predominantly rural in nature; however the majority of businesses are located in an urban location. The majority of businesses in Colchester are in urban areas.	opportunities presented by Garden Communities ensure that this mix can be adequately provided; in contrast, without such an	Garden Communities ensure that this mix can be adequately provided; in	captures the economic benefits of international gateways
Commuting patterns	All the authorities registered significant proportions of residents travelling outside to other local authority areas to find employment. Just 59.9% of residents in Braintree remained in the District for their work, which was the lowest percentage of the Districts and Boroughs. Tendring was the next highest, followed by Colchester with the lowest proportion of residents travelling elsewhere for employment.	that out commuting will continue and the location of new housing and employment opportunities would remain disparate.		
International and European wildlife designations	In the Plan Area there are a number of Ramsar sites which include Hamford Water, and parts of the Colne and Blackwater estuaries which include coastal areas, estuaries, rivers and lakes/reservoirs. These Ramsar sites are also SPAs. There is also one 1 SAC in the area: a large coastal area known as Essex Estuaries	The exploration of strategic growth in a plan led system at an early stage enables the results and recommendations of HRA and AA to be factored into plan making at the strategic level. This ensures that mitigation strategies can be developed as per the recommendations of these studies to alleviate pressure on designations and eradicate any 'likely significant effects.'	5) To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	
National and local wildlife designations	There are a number of National Nature Reserves, SSSIs, Local Wildlife Sites and Local nature Reserves in the strategic area.	The exploration of strategic growth in a plan led system at an early stage, enables the green infrastructure of the strategic area to be interconnected and enhanced through a joined-up approach to new settlements and associated economies of scale that		

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)
		could otherwise not be expected.	
Car ownership	Tendring and Colchester are above the regional and national averages for households owning 1 or more cars, in contrast with Braintree which is lower.	expected to increase without sustainable tra the development of solutions behaviour, red	6) To achieve more sustainable travel behaviour, reduce the need to travel
Congestion	Congestion is common on specific sections of the Council-managed network.	options at a strategic level that ensure a range of employment opportunities	and reduce congestion
Air quality	There are a number of AQMAs in Colchester	and services are accessible by sustainable means.	
Congestion and interconnectivity	There are network efficiency issues on a number of strategic inter-urban routes which are operating at or near to capacity. The Government-managed A12 has recognised issues with poor reliability and delays.	Without a strategic plan-led approach to growth, it is possible that development requirements, on a district / borough wide basis are not forthcoming at the specific	7) To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary transport infrastructure to support new
Transport infrastructure	There is a strategic need for transport infrastructure improvements associated with the A12 and A120	scales required to stimulate transport infrastructure delivery and wider interconnectivity of more	
Rural transport	The strategic area is largely rural in nature, and rural public transport services and interconnectivity is poor.	rural areas with sustainable transport improvements.	development
Educational achievement	Tendring on average has lower proportions of students achieving KS4 results across all measures when compared with Braintree and Colchester. This trend extends to adult qualifications, where Braintree and Colchester are above regional and national averages for adults with NVQ1 level qualifications or higher. In general, Tendring has a less educated population than Braintree, Colchester, the sub region and nation.	Solutions to address these two issues can be considered to be viable only through Garden Communities at the strategic level that can incorporate and stimulate the provision of new primary and secondary school facilities by meeting required dwelling yield thresholds.	8) To improve the education and skills of the population
School capacity	School capacities are forecast to be in deficit, when adjusted for new housing requirements		

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)
Heritage assets at risk	According to the Heritage at Risk Register (2016), there are 15 assets listed as being at risk in Tendring. This consists of 7 Scheduled Monuments, 4 Listed Buildings and 4 Conservation Areas. There are 7 assets listed as being at risk in Braintree. This consists of 3 Scheduled Monuments, 2 listed places of worship and 2 Conservation Areas. There are 10 assets listed as being at risk in Colchester. This consists of 4 Scheduled Monuments, 2 listed places of worship, 1 Listed Building and 3 Conservation Areas.	A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in more suitable areas regarding the protection of the historic environment; in the absence of this approach district / borough wide needs would be met more independently and development pressures could lead to the allocation of loss suitable land or urban	9) To conserve and enhance historic and cultural heritage and assets and townscape character?
Listed buildings	There is a concentration of listed buildings in the district of Braintree and also around historic towns such as Colchester.	of less suitable land or urban concentration / expansion at higher densities which could impact on Conservation	
Historic towns	Colchester is the country's oldest town and the historic environment should be effectively protected and valued for its own sake, as an irreplaceable record which contributes to our understanding of both the present and the past.	Areas and historic cores. The exploration of Garden Communities at the scales identified also ensures that mitigation strategies can be successfully and holistically integrated over a wide area with additional potential for the enhancement of any heritage assets or their settings.	
Renewable energy use	Tendring District, Colchester Borough and Braintree District all consume more energy from non-renewable sources as a percentage of their consumption compared to the East of England as a whole	Solutions to address this issue can be considered to be viable only through Garden Communities at the strategic level that can incorporate and stimulate the provision for renewable energy and energy efficiency aspirations through economies of scale.	10) To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation.
Water scarcity and management	Water management is challenging given the combination of high development growth and it being one of the driest	In the absence of the strategic Part 1 for Local Plans, development could	11) To improve water quality and address water

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)
	counties in England. In respect of water quantity a significant portion of the resource is considered to be 'water stressed'; the resource availability status of rivers and aquifers show that they are generally over abstracted; and not self-sufficient in relation to local sources of water supply and needs to import substantial quantities of water to satisfy existing demand	come forward that does not explore holistic approaches to meeting water demand within the strategic area.	scarcity and sewerage capacity
Fluvial flood risk	Although flooding cannot be completely prevented, its impacts can be avoided and reduced through effective planning and land management. 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.	A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in areas that are less susceptible to flooding; in the absence of this approach district / borough wide needs would be met	12) To reduce the risk of fluvial, coastal and surface water flooding
Surface water flood risk	Surface water flood risk is relatively high with all main settlements assessed being ranked in the top 1,000 settlements most susceptible to surface water flooding.	more independently and development pressures could lead to the allocation of less suitable land or urban concentration / expansion at	
Coastal flood risk	Significant levels of flood risk have been identified along the Essex coast and inland along river stretches.	higher densities which would exacerbate surface water flood risk. The exploration of Garden Communities at the scales identified also ensures that sustainable drainage methods can be successfully and holistically integrated over a wide area with additional potential for biodiversity gain.	
Air quality	There have been general reductions on the average energy consumption on roads in the area. Similar reductions are apparent on the majority of roads throughout all authorities with the exception of minor roads in Colchester.	There is a need to allocate strategic development in such a way that air quality issues in Colchester are not exacerbated. Without a strategic approach across the HMA, it is possible that the Borough Council would	13) To improve air quality

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)
		be prompted to allocate less suitable land, or a number of urban extensions to the main town of Colchester, to meet their borough-wide needs as stated in the OAN Report.	
AQMAs	There are a large number of AQMAs in the town of Colchester.	A plan-led approach over the wider strategic area ensures that housing and employment needs can be met in more suitable areas as opposed to any concentration / expansion of towns at higher densities which could exacerbate air quality issues .	
AONB pressures	There is one AONB, Dedham Vale, which lies on the border of Suffolk and Essex in Colchester Borough covering an area of 90 sq km. It has been designated such because it is an exceptional example of a lowland river valley and plans are being explored to extend this designation westward.	A strategic approach to growth in the HMA has the ability to preserve and enhance such designations through exploring options over a wider geographical area. Without such an approach, Colchester Borough Council could be prompted to allocate less suitable land in the Borough to meet unmet development requirements as identified in the OAN Report, potentially including land that negatively impacts on the AONB or its future enhancement.	14) To conserve and enhance the quality of landscapes
Agricultural land and soil quality	There are significant areas of Grade 1 agricultural land within Tendring, and smaller areas within Colchester Borough.	A strategic approach to growth in the HMA has the ability to protect such areas through exploring options over a wider geographical area. Without such an	15) To safeguard and enhance the quality of soil and mineral deposits?

Key Issues	Description / Supporting Evidence	State of environment in absence of the Common Strategic Part 1 for Local Plans	Sustainability Objective (SO)
		approach, Colchester Borough Council and Tendring District Council could be prompted to allocate Grade 1 land to meet unmet development requirements as identified in the OAN Report.	
Preserving mineral deposits	The area has extensive deposits of sand and gravel. The sand and gravel resources in Essex are significant in national, subnational and local terms - Essex is one of the largest producers in the UK; most geographically extensive and significantly mixed within the centre and north of Essex – namely the districts of Uttlesford, Braintree, Chelmsford, Colchester and Tendring.	The exploration of meeting growth needs holistically over the strategic area allows for the preservation of mineral deposits through their consideration in allocating sites. Without such an approach, district / borough wide growth targets would need to be met on a more strictly focused LPA level, which could lead to development pressures on more constrained land to meet demand, including exploring development in Minerals Safeguarding Areas (MSAs).	

5 The Approach to Assessing Strategic Content within the Sustainability Appraisal

As previously set out, the Common Strategic Part 1 for Local Plans is intended to form part of each of the authorities' separate Local Plan, with the main purpose of covering the strategic Local Plan requirements of:

- Articulating a spatial portrait of the area, including its main settlements and strategic infrastructure, as a framework for accommodating future planned growth;
- Setting out the numbers of additional homes and jobs across the area that will be needed covering the plan period to 2033;
- Providing a strategic vision for how planned growth in north Essex will be realised;
- Setting strategic objectives and policies for key growth topics; and
- Highlighting the key strategic growth locations across the area and the necessary new or upgraded infrastructure to support this growth.

The SA, in line with the scope of the Common Strategic Part 1 for Local Plans, is required to assess the impacts of the three authorities' strategic content. For this purpose, and as required of SA, a broad sustainability framework relevant to the geographical scope of the three authorities has been devised. In addition, and again relevant to the key sustainability issues of the three authorities, a site assessment framework has been developed for the purpose of assessing the sustainability of Garden Community options in the whole area on a quantitative and comparable basis and crucially to the same level of detail.

The methodology adopted for the SA of the Common Strategic Part 1 for Local Plans represents an amalgamation of the work undertaken for each authority's Local Plan Sustainability Appraisal Scoping Report, all of which have been subject to formal consultation as per the requirements of the SEA Regulations. In addition, work has been undertaken by Essex County Council (ECC) and the Advisory Team for Large Applications (ATLAS) to assist the authorities in selecting suitable strategic, or large scale development sites in conjunction with the site assessment criteria / frameworks of each authority's SA, and incorporating Town and Country Planning Association (TCPA) Garden City principles. This work has also been factored into formulating an appraisal framework for assessing Garden Community options and alternatives.

5.1 An Overview of the Three Authorities Local Plan SA Sustainability Objectives

Work has been undertaken by the North Essex Authorities and ECC in selecting suitable strategic or large scale development sites in conjunction with the site assessment criteria / frameworks of each authority's SA. This work identified the Sustainability Objectives of each authority's Local Plan SA and sought to develop a common framework for the purpose of assessing cross-boundary Garden Community options across Braintree, Colchester and Tendring.

In response to the emergence of a Common Strategic Part 1 for Local Plans, it is considered that this work, and the principle of amalgamating the SA methodologies of the three authorities, is highly relevant for assessing all strategic elements of the three authorities' Local Plans. The development of each authorities' Local Plan SA methodologies have been developed initially with such an with alignment in mind, in order to effectively assess any cross-boundary sites and themes across the Housing Market Area (HMA). The following table summarises the three authorities'

respective Local Plan SA Framework Objectives.

Table 3: Sustainability Objectives for the Three Authorities Local Plan SAs

Braintree District Council	Colchester Borough Council	Tendring District Council
Safe environments/ quality of life/community cohesion	1.Decent/Affordable Homes	1.Decent/affordable homes
2.Decent homes	2.Sustaianble location/efficient use of land	2.Harness the District's economic strengths
3.Improve health/reduce health inequalities	Prosperous economy – opportunities for jobs/vitality of centres	3.Skills base/learning opportunities
4.Vitality & viability of centres	4.Sustainable travel behaviour	4.Sustainable travel/international gateways
5.Levels of prosperity & economic growth	5.Resiliant communities/better economic & social outcomes	5.Wellbeing through community cohesion & social capital
6.Biological & geological diversity	6.Reduce inequalities in health/safety by community cohesion	6.Reduce levels of poverty & exclusion
7.Sustainable transport choices & uptake	7.Conservation/townscape/ heritage assets	7.Reduce contributions to climate change
8. Accessibility & transport infrastructure	8.Natural environment/ biodiversity	8.Natural and historic assets
9. Education & skills	9.Efficient use of energy/reduce/ reuse/recycle	9.Prudent use of natural resources
10. Cultural heritage	10.Reduce contributions to climate change	
11.Reduce climate change		•
12. Water quality & address water scarcity/sewerage capacity		
13. Reduce flood risk		
14.Improve air quality		
15. Maintain/enhance landscape/townscape quality		
16.Safeguard/enhance soil quality		

It is considered that there is sufficient overlap between the three authorities' Local Plan SA

Objectives so as to create a single framework that would be applicable and relevant to the wider area. Despite this, it is felt necessary to create two frameworks to assess different elements / content of the Common Strategic Part 1 for Local Plans. Whereas the Objectives above reflect the topics required of sustainability appraisal in line with the requirements of Local Plans as set out in in the NPPF, there is a need to ensure that issues of local distinctiveness are captured. With that in mind, two separate frameworks have been formulated: one to assess content relevant to the numbers of additional homes and jobs across the area, providing a strategic vision for planned growth and strategic objective and another to reflect Garden Community options in line with more locally distinctive pressures in specific locations.

5.2 Developing a Common Sustainability Framework for Assessing Options: The Level of Growth & Strategic Objectives

The following framework sets out the amalgamation of each authority's Local Plan SA framework for the assessment of options regarding housing and employment growth, a common strategic vision and common strategic objectives.

Table 4: Sustainability Framework for Assessing the Level of Growth & Strategic Objective Options

SA Objective	SA Criteria	Potential indicators
Create safe environments which improve quality of life, community cohesion	 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? 	 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
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	 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? 	- 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
3) To improve the health of the District's residents and mitigate/reduce potential health inequalities	- Will it ensure access to health facilities? - Will it ensure access to sport and recreation facilities, open space and accessible green space? - Will it encourage access by walking or cycling?	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

SA Objective	SA Criteria	Potential indicators
		- Percentage of new residential development within walking and cycling distance to sport and recreation facilities / open space
4) 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	 Will it improve the delivery of a range of employment opportunities to support the growing population? Will it tackle employment associated deprivation? Does it seek to prevent loss of retail and other services in rural areas? Does it promote and enhance the viability of existing centres by focusing development in such centres? Will it enhance the area's potential for tourism? Will it promote development of the ports? Will it encourage the rural economy and diversification of it? Will it support business innovation, diversification, entrepreneurship and changing economies? 	- Amount of floor space developed for employment, sqm - Amount of completed retail, office and leisure development delivered (and in centres) - Amount of completed retail, office and leisure development across the three authority area - Number of jobs created in rural areas - Number of jobs created in the ports - Number of developments approved associated with the tourism sector
5) To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity	 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? Will it conserve and enhance species diversity, and in particular avoid harm to indigenous BAP priority species? 	Number of SSSIs in favourable condition Amount of development in designated areas Area of land offset for biodiversity
6) To achieve more sustainable	- Will it increase and/or improve the availability and usability of sustainable	- Percentage of journeys to work by walking and cycling

SA Objective	SA Criteria	Potential indicators
travel behaviour, reduce the need to travel and reduce congestion	transport modes? - Will it seek to encourage people to use alternative modes of transportation other than private vehicle? - Will it lead to the integration of 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?	and percentage of journeys to work by public transport
7) To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary transport infrastructure to support new development	 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? 	- Number / amount of new homes / employment development completed at ward level within Growth / Regeneration Areas - Percentage of new development within 30 minutes of community facilities (as defined by each authority) - Percentage of new residential development within 30 minutes of public transport time of a GP, hospital, primary and secondary school, employment and a major retail centre
8) To improve the education and skills of the population	 Does it seek to improve existing educational facilities and/or create more educational facilities? Does it seek to improve 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 new housing be supported by school expansion or other educational 	Additional capacity of local schools / incidents of new school applications Level 2 qualifications by working age residents. Level 4 qualifications and above by working age residents. Employment status of residents.

SA Objective	SA Criteria	Potential indicators
	facilities where necessary?	- Average gross weekly earnings.
		- Standard Occupational Classification.
9) To conserve and enhance historic and cultural heritage and	- Will it protect and enhance designations, features and areas of historical, archaeological and cultural value in both urban and rural areas?	- Percentage of new and converted dwellings on previously developed land
assets and townscape character?	- Will it have a negative impact on the significance of a designated historic environment asset or its setting?	- Number of listed buildings demolished, repaired or brought back to use, including locally listed buildings
	- Does it seek to enhance the range and quality of the public realm and open	- New Conservation Area Appraisals adopted
	spaces? - Will it reduce the amount of derelict, degraded and underused land?	- Number of Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens (and
	- Does it encourage the use of high quality design principles to respect local	percentage at risk)
	character?	- Area of highly sensitive historic landscape characterisation type(s) which have been altered and
	- Will / can any perceived adverse impacts be reduced through adequate mitigation?	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
10) To make efficient use of energy and reduce contributions to climatic	- Will it reduce emissions of greenhouse gases by reducing energy consumption?	- Total CO2 emissions
change through mitigation and	- Will it lead to an increased generation of energy from renewable sources?	Renewable Energy Installed by Type Number of zero carbon homes delivered
adaptation.		- Number of Zero Carbott flornes delivered

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SA Objective	SA Criteria	Potential indicators
	- Will it encourage greater energy efficiency? - Will it improve the efficient use of natural resources, minimising waste and promoting recycling?	
11) To improve water quality and address water scarcity and sewerage capacity	- Will it lead to no deterioration on the quality of water bodies? - Will water resources and sewerage capacity be able to accommodate growth?	Quality of Rivers (number achieving ecological good status) Number of planning permissions granted contrary to the advice of the Environment Agency on grounds of water quality
12) To reduce the risk of fluvial, coastal and surface water flooding	 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)? Does it seek to avoid increasing flood risk (fluvial, surface water, groundwater) in areas away from initial development? 	Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds Number of SUDS schemes approved by ECC
13) To improve air quality	 Will it improve, or not detrimentally affect air quality along the A12 or A120? Does it direct growth away from AQMAs? Does it seek to improve or avoid increasing traffic flows generally? 	- Number of Air Quality Management Areas
14) To conserve and enhance the quality of landscapes	- 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	Percentage of new and converted dwellings on previously developed land Number of proposals permitted within areas noted for their high landscape value Number of proposals permitted contrary to a desire to

Strategic Part 1 - Sustainability Appraisal: Preferred Options (June 2016)

SA Objective	SA Criteria	Potential indicators
	features of the local landscape?	restrict coalescence
15) To safeguard and enhance the quality of soil and mineral deposits?	 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? 	- Percentage of new development on high quality agricultural land (ALC) - Number of developments proposed within MSAs - Contaminated land brought back into beneficial use, hectares

5.2.1 The Appraisal of Non-Site Related Policy Content

The SA of the Common Strategic Part 1 for Local Plans appraises the document's policies against the Sustainability Objectives (SOs) outlined in the above framework. The aim is to assess the sustainability effects of the document following implementation. The appraisal will look at the secondary, cumulative, synergistic, short, medium and long-term permanent and temporary effects in accordance with Annex 1 of the SEA Directive, as well as assess alternatives and suggest mitigation measures where appropriate. The findings will be accompanied by an appraisal matrix which will document the effects over time.

For clarity, within this Environmental Report, appraisals will be set out in the same format as shown in the following table.

Table 5: Impact on Sustainability Objectives

	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short Term															
Medium Term															
Long Term															

The content to be included within the table responds to those 'significant effects' of the policy or element of the Common Strategic Part 1 for Local Plans subject to appraisal. Appraisals will also look at the following:

- Temporal effects;
- Secondary, Cumulative and Synergistic effects;
- The appraisal of Alternatives;
- Impacts on indicators; and
- Proposed mitigation measures / recommendations

These, and 'significant effects' are further described in the following sub-sections.

5.2.2 Description of 'Significant Effects'

The strength of impacts can vary dependant on the relevance of the policy content to certain sustainability objectives or themes. Where the policies have been appraised against the Sustainability Objectives the basis for making judgements within the assessment is identified within the following key:

Possible impact	Basis for judgement
++	Strong prospect of there being significant positive impacts
+	Strong prospect of there being minor positive impacts
+/?	Possibility of either positive or negative impacts, or general uncertainty where there is a lack on current information (to be elaborated in commentary in each instance)
0	No impact
N/A	Not applicable to the scope or context of the appraised content
-	Strong prospect of there being minor negative impacts and mitigation would be possible
	Strong prospect of there being significant negative impacts with mitigation unlikely to be possible (pending further investigation)

Commentary is also included to describe the significant effects of the policy on the sustainability objectives.

5.2.3 Description of 'Temporal Effects'

The appraisals of the policies contained within the Common Strategic Part 1 for Local Plans document recognise that impacts may vary over time. Three time periods have been used to reflect this and are shown in the appraisal tables as S (short term), M (medium term) and L (long term). For the purpose of the policy elements of the Plan S, M and L depict:

- (S) Short term: early stages of the plan period.
- (M) Medium Term: middle stages of the plan period.
- (L) Long term: latter stages of the plan period (2033) and where relevant beyond

5.2.4 Description of 'Secondary, Cumulative and Synergistic Effects'

In addition to those effects that may arise indirectly (secondary effects), relationships between different policies will be assessed in order to highlight any possible strengthening or weakening of impacts from their implementation together. Cumulative effects respond to impacts occurring directly from two different policies together, and synergistic effects are those that offer a strengthening or worsening of more than one policy that is greater than any individual impact.

5.2.5 Description of 'Alternatives Considered'

Planning Practice Guidance states that reasonable alternatives are the different realistic options considered by the plan-maker in developing the policies in its plan. They must be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made. The alternatives must be realistic and deliverable.

Alternatives for the direction of policies will be appraised and chronicled alongside each appraisal where relevant and identified, together with the reason for their rejection / non-progression.

5.2.6 Description of 'Proposed Mitigation Measures / Recommendations'

Negative or uncertain impacts may be highlighted within appraisals. As such, mitigation measures may be needed and these will be highlighted in this section for each policy where relevant. In addition to this, this section will also include any recommendations that are not directly linked to negative or uncertain impacts, but if incorporated may lead to sustainability improvements.

5.3 Developing a Common Sustainability Framework for Assessing Options: Garden Communities

The following framework sets out the amalgamation of each authority's Local Plan SA Site Assessment Framework with the additional incorporation of TCPA Garden City Principles for the assessment of options regarding Garden Communities. It has been developed in conjunction with the Local Plan SA Objectives from each authority in conjunction with work undertaken by ATLAS and ECC. The framework shows each amalgamated objective in turn alongside corresponding relevant TCPA Garden City Principles and any other considerations required. This framework has been developed in order to capture each principle of a successful Garden City, with evidence of local considerations in the area of the three authorities.

The basis for making judgements within the assessment of Garden Communities is identified within the following key:

Possible impact	Basis for judgement
++	Strong prospect of fully meeting criteria with significant wider benefits
+	Reasonable prospect of fully meeting criteria
+/?	Reasonable prospect of partially meeting criteria
-	Unlikely to fully meet criteria however mitigation possible regarding impacts
	Unlikely to meet criteria without significant negative impacts (pending further detailed investigation regarding mitigation)

The appraisal of Garden Community options have been assessed on a largely qualitative basis in line with the strategic nature of each option and the level of information available for each option at the present time. With this in mind, this SA is intended to be a high level tool to assist the relevant authorities in the selection of Garden Communities across the wider area. It should be acknowledged that at this stage, each option is therefore only broadly comparable.

It should also be noted that in the appraisal of options, judgements have been made in line with the eventual scope and scale of each proposal. To that effect, what would constitute a significant constraint for a smaller or non-strategic site may represent a significant opportunity at the scale of an effective Garden Community. This is particularly relevant for infrastructure requirements and it should be acknowledged that Garden Communities can meet the necessary thresholds to deliver and stimulate infrastructure provision to the benefit of the new and wider existing communities.

Strategic Part 1 - Sustainability Appraisal: Preferred Options (June 2016)

In addition to the individual appraisal of the Garden Community options, commentary will be included that explores various broad cumulative impacts within the scope of the Common Strategic Part 1 for Local Plans document, and also any other strategic issues in the wider area.

Table 6: Sustainability Framework for Assessing Garden Community Options

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
Physical Limitations – Absence of insurmountable problems (e.g. access, ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality) - Incorporation of SUDS.	(Adapted from NPPG, BDC SA Objectives 13 & 14)).
2. Impacts – Acceptable impacts on high quality agricultural land, important landscape features, townscape features, sites of nature conservation interest and heritage assets	 Reflect a fusion of the best of the past while embracing new materials and the needs of modern living Acceptable impacts only on sites of nature conservation interest. A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces. Acceptable impacts only on high quality agricultural land, important landscape features. 	(Adapted from NPPG, BDC SA Objectives 6, 10, 15 & 16 CBC SA Objectives 7 & 8, TDC SA Objective 8).
3. Environment/Amenity – Acceptable relationship with and impact on occupiers of existing properties and neighbouring areas/towns (maintaining adequate separation)	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	(Adapted from NPPG),
4. Transport – Incorporation of integrated and accessible sustainable transport systems, with walking, cycling and public transport designed to	 New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision. Walking, cycling and public transport should be the most attractive and prioritised 	(Adapted GCP9, BDC SA Objectives 7 & 8, CBC SA Objective 4, TDC SA Objective

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
be the most attractive forms of local transport	forms of transport in the garden city.	4).
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	
5. Resilience - Positive contribution towards maintaining resilient town centres and identified regeneration and development priority areas and institutions (including Essex University)	 Positive contribution towards town centres. Positive contribution towards identified regeneration priority areas and institutions 	(Adapted NPPG, BDC SA Objectives 4 & 5, CBC SA Objective 3).
6. Housing – Provision of a mix of tenures, including affordable homes and a range of housing types (including self-build/custom build and gypsy and traveller pitches).	 Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs. An appropriate number homes in a new Garden City must be 'affordable' for ordinary people. 	(Adapted GCP4, BDC SA Objective 2, CBC SA Objective 1, TDC SA Objective 1).
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	
	- Aspire to the very best domestic and commercial architecture with sensitivity to local	

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)		
	vernacular design and materials. - New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.			
7. Employment Opportunities – Provision for a wide range of local jobs within easy commuting distance from homes	New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household being easily accessible There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	(GCP5, CBC SA Objective 3, TDC SA Objective 2).		
8. Mixed-use Opportunities – Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	(GCP8).		
9. Environmental Quality & Sustainability – Incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SUDS and zero-carbon/energy-positive technology to ensure climate resilience.	 Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities. Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food. Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind. Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation. Garden Cities must demonstrate the highest standards of technological innovation in 	(Adapted GCP7, BDC SA Objective 11, CBC SA Objectives 9 & 10, TDC SA Objective 7).		

Strategic Part 1 - Sustainability Appraisal: Preferred Options (June 2016)

Objective	Corresponding Garden City Principle(s) and any additional considerations	Relevant Local Plan SA Objectives (from each authority)
	zero carbon and energy positive technology to reduce the impact of climate emissions. - In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	
10. Developability / Deliverability - The growth area is available, commercially attractive, and capable of delivering necessary physical/social/green infrastructure and could be viably developed within [6-10] years. Satisfactory mechanisms are in place to capture increase in land value to meet infrastructure costs and manage and maintain assets in the long term	 Capture rising land values created by the development of the town can repay infrastructure costs Be commercially attractive with strong market conditions and value potential Availability of land being put forward for development with active landowner/developer interest Scope for delivery structures through active and positive public and private sector engagement 	(NPPF, NPPG, GCP1, GCP3, BDC SA Objective 12, CBC SA Objective 6, TDC SA Objective 5).

6 The Appraisal of the Common Strategic Part 1 for Local Plans including Reasonable Alternatives

The following sub-sections respond to the appraisal of each element of the Common Strategic Part 1 for Local Plans. This responds to an appraisal of each policy within the document: In each sub-section, an appraisal of all identified reasonable alternatives has been included for transparency and robustness. The process behind the identification of each alternative has been included, citing the source of each alternative in each instance. The following elements of the Common Strategic Part 1 for Local Plans are subject to assessment in this Sustainability Appraisal:

- The Vision for the Strategic Area
- The Strategic Objectives
- Policy SP1 Presumption in Favour of Sustainable Development
- Policy SP2 Meeting Housing Needs
- Policy SP3 Providing for Employment
- Policy SP4 Spatial Strategy for North Essex (including separate assessment of Garden Community options)
- Policy SP5 Infrastructure and Connectivity
- Policy SP6 Place Shaping Principles
- Policy SP7 Development and Delivery of New Garden Communities in Essex
- Policy SP8 East Colchester / West Tendring New Garden Community
- Policy SP9 West of Colchester / East of Braintree New Garden Community
- Policy SP10 West of Braintree New Garden Community

6.1 The Vision for the Strategic Area

6.1.1 Context / Justification

It is important that addressing growth at any spatial scale is founded on a clear vision of how and where change should occur. The vision for North Essex sets this out at a strategic level and provides a context for the more detailed vision for the growth of each individual authority's area.

The Vision has been identified as how the Strategic Area would like progress over a 15 year plan period to 2033. The National Planning Policy Framework expects local authorities to set out the strategic priorities for the area in the Local Plan, addressing:

- the homes and jobs needed in the area
- the provision of infrastructure for transport and telecommunications
- the provision of education, health, community and cultural infrastructure, and
- conservation and enhancement of the natural and historic environment, including landscape

The Vision for the Strategic Area is as follows:

THE VISION FOR THE STRATEGIC AREA:

North Essex will be an area of significant growth over the period to 2033 and beyond, embracing positively the need to build well-designed new homes, create jobs and improve and develop its infrastructure for the benefit of existing and new communities.

Sustainable development principles will be at the core of the strategic area's response to its growth needs, balancing social, economic and environmental issues. Green infrastructure and new and expanded education and health care facilities will be planned and provided; while the countryside and heritage assets will be protected and enhanced.

At the heart of our strategic vision for North Essex are new garden communities. The garden communities will attract residents and businesses who value innovation, community cohesion and a high quality environment, and who will be keen to take an active role in managing the garden community to ensure its continuing success. Residents will live in high quality, innovatively designed, contemporary homes, accommodating a variety of needs and aspirations. There will be a network of leafy streets and green spaces, incorporating and enhancing existing landscape features. This will provide safe and attractive routes and sustainable drainage solutions, as well as excellent opportunities for people to play. Open spaces will be attractive areas which offer leisure and recreation opportunities for residents of the garden communities. All Garden City principles will be positively embraced including new approaches to delivery and partnership working and sharing of risk and reward for the benefit of the new communities.

Temporal	Sustainability Objectives (SO)														
Impacts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	+	+	+	+	N/A	+/?	N/A	+	N/A	N/A	N/A	N/A	N/A	N/A
Medium	N/A	+	+	+	+	N/A	+/?	N/A	+	N/A	N/A	N/A	N/A	N/A	N/A
Long	N/A	++	++	++	++	N/A	++	N/A	++	N/A	N/A	N/A	N/A	N/A	N/A

Table 7: Impact on Sustainability Objectives: The Vision for the Strategic Area

6.1.2 Significant and Temporal Effects

The strategic vision for the area will have short and medium term positive impacts on housing and employment related Sustainability Objectives (SO2 and SO4 respectively). The significance of these impacts will increase in the long term with the principle of sustainable Garden Communities being developed as part of a sustainable strategy for growth and in response to objectively assessed housing and employment needs, and also their wider benefits. This will also be the case for health (SO3), the natural environment (SO5), and the historic environment (SO9) through the provision of green infrastructure, new and expanded education and health care facilities and recreational land and also the protection and enhancement of countryside and heritage assets.

There will additionally be significant long term impacts on ensuring the necessary transport infrastructure to support new development (SO7) in line with the emergence of the Garden Communities in the latter stages of the three authorities' Local Plan periods. There will be an uncertainty in the short and medium term regarding these impacts, where it is unclear at this stage whether the transport and connectivity improvements will be suitably aligned to the initial phases of the Garden Communities; this is not a criticism of the Vision however, which need not be explicit of such details at such an early stage of a long and detailed process.

It should be noted that the specific Garden Community options highlighted have not been subject to appraisal as part of the Vision; these and reasonable alternatives are appraised within their own context as land allocations within Policy SP4 of this SA. As such, there will be no assessed impact on a large amount of the Sustainability Objectives relevant to more site or policy specific considerations as these are subject to more focused assessment within the appraisal of Policy SP4.

6.1.3 Secondary Effects

The emergence of Garden Communities within the three authorities' area can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. Garden Communities, in line with and in conformity to TCPA Garden City Principles, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

6.1.4 Alternatives Considered

The Vision can be seen as a general summary of the content of the Common Strategic Part 1 for Local Plans. The individual elements of the Vision are elaborated on in more detail within other policies of the document. Alternatives are explored in more detail within the assessment of these policies elsewhere within this SA, commensurate to their individual context.

6.1.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

6.2 The Strategic Objectives for the Strategic Area

6.2.1 Context / Justification

The following strategic objectives are designed to support the vision for the area and provide a basis for the development of strategic topic-based policies that will help in achieving the vision.

The appraisal of the strategic objectives explores whether the objectives are compatible with those objectives formulated for the Sustainability Appraisal. This has involved a compatibility matrix, which looks to see whether the Sustainability Objectives are met, with the overall purpose of ensuring that the Strategic Area's key sustainability issues are adequately covered with a mind to their resolution where possible.

The Strategic Objectives for the Strategic Area are as follows:

THE STRATEGIC OBJECTIVES

- Providing Sufficient New Homes to provide for a level and quality of new homes to meet the needs of a growing and ageing population in North Essex; to achieve this by ensuring the availability of developable land in appropriate locations and that the market delivers a suitable mix of housing types.
- Fostering Economic Development to strengthen and diversify local economies to provide more jobs; and to achieve a better balance between the location of jobs and housing, which will reduce the need to travel and promote sustainable growth.
- Providing New and Improved Infrastructure to make efficient use of existing transport
 infrastructure and to ensure sustainable transport opportunities are promoted in all new
 development. Where additional capacity is required in the form of new or upgraded
 transport infrastructure to support new development, to ensure this is provided
 alongside the development. To enable provision of upgraded broadband infrastructure
 and services.
- Addressing Education and Healthcare Needs to provide good quality educational
 opportunities as part of a sustainable growth strategy, including practical vocational
 training and apprenticeships linked to local job opportunities. To work with partners in
 the NHS and local health partnerships to ensure adequate provision of healthcare
 facilities to support new and growing communities.
- Ensuring High Quality Outcomes to promote greater ambition in planning and delivering high quality sustainable new communities, including through new garden communities and strategic growth areas. Overall, new development must secure high standards of urban and built design which creates attractive places where people want to spend time.

Table 8: Impact on Sustainability Objectives: The Strategic Objectives for the Strategic Area

Sustainability	Strategic Obje	ective			
Objectives	Providing Sufficient New Homes	Fostering Economic Development	Providing New and Improved Infrastructure	Addressing Education and Healthcare Needs	Ensuring High Quality Outcomes
1.Safe Environments	N/A	N/A	N/A	N/A	+
2. Decent homes	++	N/A	N/A	N/A	N/A
3. Health inequalities	N/A	N/A	N/A	++	N/A
4. Sustainable employment	N/A	++	+	+	N/A
5. Natural environment	N/A	N/A	N/A	N/A	N/A
6. Sustainable travel	+	+	++	N/A	N/A
7. Accessibility / infrastructure	+	+	++	N/A	N/A
8. Education & Skills	N/A	N/A	N/A	++	N/A
9. Historic environment	N/A	N/A	N/A	N/A	+
10. Climate change	N/A	N/A	N/A	N/A	+
11. Water / sewerage	N/A	N/A	N/A	N/A	N/A
12. Flood risk	N/A	N/A	N/A	N/A	N/A
13. Air quality	N/A	N/A	N/A	N/A	N/A
14. Landscape quality	N/A	N/A	N/A	N/A	N/A
15. Soil and minerals	N/A	N/A	N/A	N/A	N/A

6.2.2 Significant and Temporal Effects

A number of significant positive impacts have been assessed as forthcoming on Sustainability Objectives related to sustainable housing and employment provision (SO2 and SO4), health (SO3), sustainable travel (SO6), transport infrastructure (SO7) and education and skills (SO8). These impacts can be expected to be experienced in the short to long term.

The Common Strategic Part 1 for Local Plans' Strategic Objectives could be perceived to not fulfil the aspirations of a considerable proportion of the Sustainability Objectives devised for the document's appraisal, however it should be acknowledged that the document is strategic in nature and in that regard is focused specifically on those areas of sustainability that are best addressed at a strategic level. Those Sustainability Objectives not addressed by the Strategic Objectives can be deemed as more relevant to the content and context of each of the three authorities' Local Plans.

6.2.3 Secondary Effects

For the purposes of exploring the compatibility of the Strategic and Sustainability Objectives, secondary impacts have been highlighted as minor positive impacts. These can be seen as additional expected benefits emanating from the successful delivery of strategic outcomes. Positive secondary impacts have been assessed as forthcoming regarding community cohesion (SO1), employment (SO4), sustainable travel and accessibility (SO6 and SO7), townscape (SO9) and climate change adaptation (SO10).

6.2.4 Alternatives Considered

Similar in scope to the Vision, the Strategic Objectives can be seen as a general summary of the content of the Common Strategic Part 1 for Local Plans. The individual elements of the Strategic Objectives are elaborated on in more detail within other policies of the document. Alternatives are explored in more detail within the assessment of these policies elsewhere within this SA, commensurate to their individual context.

6.2.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

6.3 Policy SP1 – Presumption in Favour of Sustainable Development

6.3.1 Context / Justification

The authorities will apply a presumption in favour of sustainable development in accordance with guidance in the National Planning Policy Framework.

The policy is as follows:

POLICY SP1 – PRESUMPTION IN FAVOUR OF SUSTAINABLE DEVELOPMENT

When considering development proposals the Local Planning Authorities will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. They will always work pro-actively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Sustainable development in North Essex will demonstrably contribute to the strategic and local vision and objectives and will accord with the policies in this Local Plan (and, where relevant, with polices in neighbourhood plans). Development that complies with the Plan in this regard will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise – taking into account whether:

- Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole or
- Specific policies in that Framework or the Plan that indicate that development should be restricted

Table 9: Impact on Sustainability Objectives: Policy SP1

Temporal Impacts	Sus	Sustainability Objectives (SO)													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Medium	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Long	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

6.3.2 Significant and Temporal Effects

There will be positive impacts resulting from the inclusion of the wider position of, and the Common Strategic Part 1 for Local Plan's relationship with, the NPPF. Impacts are assessed as generally

minor within this SA relevant to the strategic context of the document. It should be noted that enhancements of sustainability benefits and impacts are likely to be possible only within a local context and in line with local distinctiveness resulting from each of the three authorities' Local Plan policies.

6.3.3 Secondary Effects

There will be no secondary impacts arising from the implementation of this policy.

6.3.4 Alternatives Considered

No alternative approaches can be considered reasonable as the policy reiterates the thread of sustainable development as espoused in the NPPF. Any alternative that deviates from this approach would be contrary to NPPF and therefore an unsound approach.

6.3.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

6.4 Policy SP2 – Meeting Housing Needs

6.4.1 Context / Justification

Provision of sufficient housing is critical to meet the needs of a growing population and for the effective functioning of local economies.

The North Essex authorities are committed to plan positively for new homes and to significantly boost the supply of housing to meet the needs of the area. To meet the requirements of national policy to establish the number and type of new homes, the authorities commissioned Peter Brett Associates to produce an Objectively Assessed Housing Need Study building on earlier work. This was first published in July 2015 and updated in January 2016. It meets the requirements of the NPPF to prepare a Strategic Housing Market Assessment (SHMA).

Detailed analysis in the report suggests that a Housing Market Area comprising Braintree, Colchester, Chelmsford and Tendring Council areas forms a sound basis for assessing housing need.

Demographic projections are the starting point for assessing how much housing will be required across an area. Based on 2012 national projections covering the period 2013 to 2037, some 4,910 more people will be living in the area each year. This translates to 2,589 additional households per year, which generates a need for an additional 2,691 new homes each year.

Analysis of economic forecasts reveals that to support the expected jobs growth would require 3,090 net new homes per year. This represents an uplift of 399 additional homes, or 15%, over the demographically projected need referred to above. The report concludes that this 15% 'future employment' uplift over the whole HMA will cover any 'market signals' adjustment that can reasonably be justified. It also makes an allowance for additional London-related migration.

The conclusion reached is that the objectively assessed need across the Housing Market Area is 3,090 new homes a year over the period 2013 – 2037. This is the number of new homes needed to provide sufficient labour to meet the number of forecast jobs. The total requirement across north Essex, excluding Chelmsford City Council's area, is 2,315 new homes per year.

The Objectively Assessed Housing Need Study and SHMA update seek to establish a balance between jobs and homes across the area, although there is some uncertainty in relation to this arising from unattributed population change (UPC) within Tendring. 550 dwellings a year is suggested as the indicative objectively assessed need for Tendring because at this level of provision affordable need can be met. This reasonable rounded figure, which should be kept under review, is considered an appropriate response to the uncertainty arising from the UPC.

Evidence on overall levels of affordable housing provision and the requirements of Gypsies and Travellers and Travelling Showpeople accommodation will be set out in more detail within the individual Local Plans, but a figure of 30% of affordable housing across the new garden communities is supported by the evidence base.

The policy is as follows:

POLICY SP2 – MEETING HOUSING NEEDS

The local planning authorities will identify sufficient deliverable sites or broad locations for their respective plan period, against the requirement in the table below.

Each authority will maintain a sufficient supply of deliverable sites to provide at least five years' worth of housing; and will work proactively with applicants to bring forward sites that accord with the overall spatial strategy and relevant policies in the plan.

	Plan period	Net additional dwellings per annum	Total requirement for plan period
Braintree	2016-2033	845	14,365
Colchester	2013-2033	920	18,400
Tendring	2013-2033	550	11,000
North Essex		2,315	

Table 10: Impact on Sustainability Objectives: Policy SP2

Temporal Impacts	Sus	Sustainability Objectives (SO)													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	++	N/A	+	N/A	N/A	N/A	0	N/A						
Medium	N/A	++	N/A	+	N/A	N/A	N/A	0	N/A						
Long	N/A	++	N/A	++	N/A	N/A	N/A	+	N/A						

6.4.2 Significant and Temporal Effects

Significant positive impacts have been highlighted in the short to long term associated with the housing need (SO2) targets set out in the Policy. There will also be positive impacts in the short-medium term on employment growth (SO4), progressing to significant positive impacts in the long term associated with the requirement that Garden Communities be forthcoming to meet residual or unmet need. This is due to the number of new homes being needed to provide sufficient labour to meet the number of forecast jobs, as per the methodology behind the identification of the need in the OAN Report, and the need to provide a range of employment opportunities in association with Garden City Principles. Although the Policy is primarily concerned with setting out housing needs across the three authorities, the link between this and employment derives from a 15% 'future employment' uplift over the whole HMA in order to cover any 'market signals' adjustment that can reasonably be justified; this ensures that a key tenet of sustainability is met associated with delivering housing and employment needs in unison.

For context, the OAN Report states that projections are robust, 'with one exception: the figures for Tendring are heavily affected by Unattributable Population Change - an error in the Census which we are unable to explain. Depending on the view taken about the UPC, the official projections may

overstate need in Tendring. If we use an alternative projection that adjusts for the UPC, the demographically projected need for Tending falls from 705 to 479 dpa.'

In considering the assessment of the Policy alongside the alternatives (see below), it should be acknowledged that 550 dwellings a year is suggested as the indicative objectively assessed need for Tendring because at this level of provision affordable need can be met. This, in conjunction with review, is considered an appropriate response to the uncertainty arising from the UPC and for this reason has been selected, in line with Tendring's Local Plan policy and evidence base requirements.

Please note that for the rest of the Sustainability Objectives, 'N/A' has been highlighted. This is due to many of these objectives being more closely related to the detailed distribution of housing in specific areas. In focusing the appraisal of this policy on more direct or directly relevant Objectives, the conclusions of the Common Strategic Part 1 for Local Plans can be better informed in relation to the whole document, with recommendations being more focused to the specific purpose of relevant elements or Policies.

6.4.3 Secondary Effects

There will be a long term secondary effect associated with education and skills (SO8) associated with the development of Garden Communities to meet residual unmet need beyond the identification of suitable sites within the context of the authorities' Local Plan requirements. This is associated with the principles of such settlements, in addition to the indirect effects of identifying growth requirements in conjunction with identifying housing growth in order to provide sufficient labour to meet forecasted employment requirements.

6.4.4 Alternatives Considered

The NPPF is clear that the HMA as whole should work to meet its OAN in full, provided that it has the sustainable capacity to do so consistent with the policies in the NPPF. How provision should be distributed between districts will depend on supply factors and policy objectives. In response to this, it should be noted that each authority has identified a justified and achievable indicative housing target in line with their work towards a Local Plan in each instance and these needs are reflected in the policy. This work has factored in the requirements of LPAs to identify a 5 year housing supply in line with, and as well as other requirements of the NPPF, notably regarding the evidence gathered through Local Plan call-for-sites processes and resultant work in the production of Strategic (Housing) Land Availability Assessments (S[H]LAAs). This work identifies land that is suitable, achievable and available (within Local Plan periods) and alternatives surrounding each authority's capacity for new growth are explored in more detail in the SA of their Local Plans, which also factor in non-strategic allocations.

The scope of the Common Strategic Part 1 for Local Plans explores options for the delivery of the residual or 'unmet' growth beyond those sites that represent a 5 year housing supply and are otherwise suitable, achievable and available over Local Plan periods in each authority. On this basis, the alternative options for both housing and employment supply largely represent the conclusions of this SA, in exploring the sustainability of the proposed Garden Community options.

Nevertheless, at the strategic level alternatives exist that could initially be perceived as reasonable across the HMA and more specifically within the three authorities participating in exploring options within the Common Strategic Part 1 for Local Plans document. The Objectively Assessed Housing

Need Study and SHMA update seek to establish a balance between jobs and homes across the area, although there is some uncertainty in relation to this arising from unattributed population change (UPC) within Tendring. A total of 550 dwellings a year is suggested as the indicative objectively assessed need for Tendring because at this level of provision affordable need can be met. This reasonable rounded figure, which should be kept under review, is considered an appropriate response to the uncertainty arising from the UPC.

For the purposes of robustness however, the alternative scenarios presented in the OAN Report have been subject to appraisal in this report. These respond to different percentage uplifts in future employment than for the 15% iterated within the preferred policy above. The alternatives, as sourced within the OAN Report are:

- Alternative 1 A lower uplift than the policy approach. This responds to 8% uplift over the HMA and represents an indicative split where Tendring still meets its SNPP provision and the uplift is reduced for the HMA partner authorities.
- Alternative 2 A higher uplift than the policy approach. This responds to 17% uplift over the HMA and represents an approach where Tendring provides only enough homes to meet its projection before any uplift is applied.

Temporal	Sustainability Objectives (SO)														
Impacts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Alternative	1 - A	lower	uplift	than	the p	olicy	appro	oach							
Short	N/A	+/?	N/A	+/?	N/A	N/A	N/A	0	N/A						
Medium	N/A	+/?	N/A	+/?	N/A	N/A	N/A	0	N/A						
Long	N/A	+/?	N/A	+/?	N/A	N/A	N/A	+/?	N/A						
Alternative	2 - A	highe	r upli	ft thai	n the	polic	y app	roach							
Short	N/A	++	N/A	+	N/A	N/A	N/A	0	N/A						
Medium	N/A	++	N/A	+	N/A	N/A	N/A	0	N/A						
Long	N/A	++	N/A	++	N/A	N/A	N/A	+	N/A						

Alternative 1 has been appraised to represent an indicative lower uplift than the 15% used in the preferred policy approach. The implications of this scenario are that housing requirements are comparatively evenly spread across the three authorities, with approximately 700 dwellings per annum identified for Tendring. The OAN Report indicates that under this alternative scenario it is possible that Tendring would have a surplus of homes against those needed to support the HMA baseline job growth and commuting patterns would shift slightly. Although similar impacts could be expected for both this alternative and the preferred policy approach, it is important to consider that this is based on two key assumptions; that housing provision in Tendring meets the SNPP 2012 housing demand, and that any surplus of workers over jobs is available to work in the rest of the HMA. For this reason impacts are uncertain. Work towards agreeing a housing requirement undertaken by Tendring District Council for the purposes of their Local Plan calculates that capacity exists as indicated and espoused in the preferred policy, as evidenced by extant planning

permissions, windfall allowances, submitted sites in the LPAs call-for-sites process as deemed suitable, achievable and available in their SHLAA and inconformity to their settlement hierarchy. For these reasons this alternative has been rejected.

Alternative 2 has been appraised to represent an indicative higher uplift than the 15% used in the preferred policy approach. In this alternative the scale of the uplift in new homes needed increases from 15% to 17% for the HMA. This is because the OAN 'starting position' for Tendring is now lower than the SNPP. This responds to an additional 50 dwellings per annum in Tendring over the plan period, with no additional changes to the preferred policy approach's housing requirement figures for the other two authorities. Although this could be perceived as a small increase over the entire HMA, which is reflected in the above appraisal, it does not address the question regarding UPC and would have implications on available land in Tendring. Impacts would be similar largely due to the alternative not being distinctly different from the preferred policy approach at the strategic level over the HMA; however the implications at the micro level, in Tendring are likely to be more significant. As per Alternative 1, work towards agreeing a housing requirement undertaken by Tendring District Council for the purposes of their Local Plan calculates that capacity exists as indicated and espoused in the preferred policy, as evidenced by extant planning permissions, windfall allowances, submitted sites in the LPAs call-for-sites process as deemed suitable, achievable and available in their SHLAA and inconformity to their settlement hierarchy. For these reasons this alternative has been rejected.

6.4.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

6.5 Policy SP3 – Providing for Employment

6.5.1 Context / Justification

A key objective for the area is to strengthen and diversify local economies to provide more jobs; and to achieve a better balance between the location of jobs and housing, which will reduce the need to travel and promote sustainable growth.

Braintree District's employment is relatively focused on industrial-type sectors, including construction and manufacturing. London Stansted airport plays a significant role in not only employing residents of the District, but through the indirect economic benefits associated with proximity with such a large employment hub.

Retail is the second largest sector by employment and plays an important role in sustaining the District's three key town centres. The financial and insurance sector, where Braintree District traditionally has a relatively small proportion of employment, has seen some strong employment growth in recent years. This may be a growth sector in the future.

Colchester is the dominant town within the Essex Haven Gateway and will accommodate much of the future growth in the sub-region. It is one of the UK's fastest growing towns and has developed a strong economy, linked to the town's historic character, cultural activities and its university.

Tendring District has a diverse economy with local employment across a range of activities. Health, retail and education are the largest sectors in terms of the number of jobs and together represent 45% of the District's total employment.

Harwich is home to Harwich International Port – one of the District's major employers. To the west of the District, the economy and labour market of Manningtree is influenced by its relative proximity to Colchester and good transport links to London. The interior of the District is largely rural and is characterised by a high-quality environment, interspersed with small settlements.

Opportunities have been identified for Tendring to develop potential future strengths in offshore wind and the care and assisted living sector.

As part of the SHMA work, an analysis of economic forecasts was undertaken together with demographic projections to establish the inter-relationship between population growth, forecasts of new jobs and the number of new homes needed to accommodate these levels of growth. Employment Land Needs Assessments have been carried out by each authority which set out the amount of employment land that is required within the Plan periods.

The policy is as follows:

POLICY SP3 – PROVIDING FOR EMPLOYMENT

A strong, sustainable and diverse economy will be promoted across North Essex with a minimum net increase of 139.1ha of employment land up to 2033. These areas are distributed to each local authority area based on a sustainable balance between jobs and the available labour force through population growth, as set out in the table below.

	Plan period	Hectares of B use employment land required
Braintree	2016-33	43.3
Colchester	2016-33	55.8
Tendring	2016-33	40
North Essex		139.1

More detailed employment policies are included in the second part of each authority's plan. However, the following strategic principles will underpin the approach to economic growth across North Essex.

- a) Sufficient land, premises and other provision will be identified to support the achievement of the minimum jobs numbers, recognising the importance of key sectors to be identified by each local authority;
- b) Priority will be given to use of previously-developed land in appropriate locations as well as, where it meets sustainable development principles, the expansion of existing employment locations;
- c) Existing and allocated employment sites will be safeguarded for employment use unless it can be demonstrated that there is no reasonable prospect of the site being used for that purpose. Alternative uses will be considered against relevant plan policies;
- d) Town and city centres are the appropriate locations for new office development; and
- e) Employment development will be a key component of the new garden communities, as well as strategic growth locations more generally.

Table 11: Impact on Sustainability Objectives: Policy SP3

Temporal	Sustainability Objectives (SO)														
Impacts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	+	N/A	++	N/A	N/A	N/A	0	N/A						
Medium	N/A	+	N/A	+	N/A	N/A	N/A	0	N/A						
Long	N/A	++	N/A	++	N/A	N/A	N/A	++	N/A						

6.5.2 Significant and Temporal Effects

The forecasts used in the SHMA work / OAN Report have an underlying principle: that planning for housing, economic land uses and community facilities / services should be integrated, so that the demand for labour is fulfilled and there is no unsustainable commuting. They have been taken from the East of England Economic Model (EEFM) which provides integrated economic, demographic and housing need forecasts. In the EEFM, population change, and the resulting household change and housing demand, are partly driven by job opportunities.

The principle of these links to identifying future job growth to housing provision is a key tenet of sustainability and as such, there will be significant positive impacts associated with employment (SO4) and in the long term also housing (SO2). Short to medium term impacts are more closely related to the strategic principles will underpin the approach to economic growth across North Essex, with long term impacts associated with the development of Garden Communities that will provide a closely aligned mix of employment and housing as per Garden City Principles and the methodology behind the forecast requirements as stated in the OAN Report. There will also be long term positive impacts on the labour market through the development of the transport infrastructure elements of the Garden Communities.

Please note that for the rest of the Sustainability Objectives, 'N/A' has been highlighted. This is due to many of these objectives being more closely related to the detailed distribution of employment in specific areas. In focusing the appraisal of this policy on more direct or directly relevant Objectives, the conclusions of the Common Strategic Part 1 for Local Plans can be better informed in relation to the whole document, with recommendations being more focused to the specific purpose of relevant elements or Policies.

6.5.3 Secondary Effects

There will be a long term secondary effect associated with education and skills (SO8) associated with the development of Garden Communities. This is associated with the principles of such settlements, in addition to the indirect effects of identifying growth requirements in a range of employment sectors tailored to needs and shortages.

6.5.4 Alternatives Considered

The OAN Report calculates need by starting from the East of England Economic Model (EEFM), as taken forward into a study's jobs-led scenarios (Edge Analytics, Phase 7 Study) and then uses a model to fix ratios; rather than to use the EEFM adjustments which used unemployment rates.

The OAN Report states that, 'in short, EEFM uses 'economic migration' to balance the local relationship between jobs and labour. Its housing forecasts are job-led forecasts: they estimate the numbers of dwellings that would be required to meet housing demand, including the demand resulting from changing employment opportunities. The job-led scenarios in the Edge Phase 7 study have the same intention and use a broadly similar approach. These scenarios take from the EEFM future workplace jobs and people employed, and three other key variables: unemployment rates, economic activity rates and commuting ratios. But to model the relationship of workplace jobs to resident population to housing demand, Edge Analytics uses its own model, PopGroup, whose mechanics are different from EEFM's. In particular, in PopGroup there is no demand-side link whereby the resident population creates local jobs through its consumption of local services; and the supply link is based on fixed ratios, rather than the dynamic adjustment through

unemployment rates used in the EEFM.'

As can be seen, the above identifies an alternative approach. This is:

• Alternative 1 – Forecasts based on EEFM findings only: Alternative 1 assumes that labour demand depends partly on the size of the local population and local consumption of services (creating jobs) and partly on wider national or even global demand. Numbers of jobs are translated into resident workers. Regarding labour supply, the future resident population is determined by natural change and trend-driven migration. The OAN Report states that, 'in short, EEFM uses 'economic migration' to balance the local relationship between jobs and labour. Its housing forecasts are job-led forecasts: they estimate the numbers of dwellings that would be required to meet housing demand, including the demand resulting from changing employment opportunities.' This method does not factor in unemployment rates, economic activity rates and commuting ratios however, which vary across the HMA, unlike the preferred methodology used in the OAN Report in which there is no demand-side link whereby the resident population creates local jobs through its consumption of local services.

Please note that a second alternative was also analysed in the OAN Report. This was a different forecasting model, known as Experian, developed by Cambridge Econometrics. This forecast showed considerably less growth than the other alternatives, and so it was not considered further in the OAN Report, nor can it be considered a reasonable alternative for the purposes of assessment in this SA.

Temporal	Sustainability Objectives (SO)														
Impacts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Alternative 1 - Forecasts based on EEFM findings only															
Short	N/A	+	N/A	+	N/A	N/A	N/A	0	N/A						
Medium	N/A	+	N/A	+	N/A	N/A	N/A	0	N/A						
Long	N/A	++	N/A	++	N/A	N/A	N/A	++	N/A						

The impacts of the alternative will be similar to the preferred policy methodology, with significant positive impacts on long term employment (SO4), and associated housing (SO2) and education and skills (SO8) objectives in line with the 'mixed use' and sustainable transport infrastructure opportunities associated with Garden Communities. Impacts in the short to medium term are however less significant, due to the alternative primarily not initially factoring in commuting; this leads to forecasts showing a disparity between population growth and job growth. The OAN Report indicates that in Braintree and Colchester there would be a higher population than identified in the 2012 Sub National Population Projections (SNPP), suggesting that if population grows in line with the official projection it may not provide enough workers. This issue would rely on being resolved by changes in commuting. The OAN Report also adds that for Tendring the EEFM figure would be well below the SNPP, confirming that trend-based population growth would result in a labour surplus. For these reasons, the alternative has been rejected.

6.5.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

6.6 Policy SP4 – Infrastructure and Connectivity

6.6.1 Context / Justification

Infrastructure and connectivity requirements are expected to regard the strategic transport network, the inter-urban road network, the A12, the A120, the A130, route based strategies; rail; public transport, walking and cycling, education and healthcare and broadband.

The policy is as follows:

POLICY SP4 – INFRASTRUCTURE AND CONNECTIVITY

Development must be supported by provision of infrastructure, services and facilities that are identified to serve the needs arising from new development.

The following are strategic priorities for infrastructure provision or improvements within the strategic area:

- New and improved infrastructure required to support economic growth, strategic and site-specific priorities outlined in the second part of each Local Plan.
- Improved road infrastructure aimed at reducing congestion and providing more reliable journey times along the A12, A120, and A133 to improve access to markets and suppliers for business, widen employment opportunities and support growth.
- Junction improvements on the A12 and other main roads to reduce congestion.
- A dualled A120 between the A12 junction and Braintree.
- Increased rail capacity, reliability and punctuality; and reduced overall journey times by rail.
- Support changes in travel behaviour by increasing opportunities for sustainable modes of transport that can compete effectively with private cars.
- To comply with sustainability objectives public transport will be prioritised, particularly in the urban areas. To meet the diversity of travel need, there will need to be new and innovative ways of providing public transport including:
 - high quality rapid bus services, in and around urban areas;
 - maximising the use of the local rail network to serve existing communities and locations for large-scale growth and
 - promotion and wider use of community transport schemes.
- Roll-out of superfast broadband across Essex to secure the earliest availability for universal broadband coverage and fastest connection speeds for all existing and new developments.
- Provide sufficient school places in the form of expanded or new primary and secondary schools.
- Ensure that essential healthcare infrastructure is provided as part of new developments of appropriate scale in the form of expanded or new doctors' and dentists' surgeries.

Table 12: Impact on Sustainability Objectives: Policy SP4

Temporal	Sus	tainal	oility (Objec	tives	(SO)									
Impacts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	N/A	++	++	0	++	++	++	N/A	0	0	N/A	N/A	N/A	N/A
Medium	N/A	N/A	++	++	0	+	++	++	N/A	0	0	N/A	N/A	N/A	N/A
Long	N/A	N/A	++	++	0	++	++	++	N/A	0	0	N/A	N/A	N/A	N/A

6.6.2 Significant and Temporal Effects

There will be significant positive impacts associated with those Sustainability Objectives related to infrastructure delivery that would specifically be related to strategic level growth and stimulated by it across the Strategic Area; these being health (SO3), sustainable transport (SO6) and education (SO8). Additionally, significant positive impacts have been highlighted for those specific assurances in the Policy; those being economic growth (SO4) through new and improved infrastructure requirements to support economic growth and strategic and site-specific priorities, and accessibility and transport infrastructure (SO7) through various identified improvements required to the strategic road and rail network to accommodate the level of growth in the Strategic Area.

'No impacts' have been identified for sustainability objectives associated with the natural environment and biodiversity (SO5) and renewable energy (SO10). This is due to there being opportunities that combined strategic level growth could stimulate aspirational improvements for wider gains or benefits. It should be acknowledged however that the delivery of such infrastructure is still possible through site specific priorities and opportunities, and their exploration at that level may be more appropriate in terms of the viability of detailed Garden Community proposals and masterplanning.

No impact has also been highlighted for water scarcity / sewerage (SO11). This is due to such infrastructure being beyond the remit of such a plan and a prerequisite of the suitability of all development. Such infrastructure requirements will be specified by the relevant service provider.

6.6.3 Secondary Effects

The impacts on housing delivery (SO2) can be considered secondary in line with the requirement of the stated infrastructure being required to support sustainable growth and communities in the first instance. This is also true of air quality (SO14) which can be expected to improve in line with assurances of sustainable transport infrastructure as contained within the Policy.

6.6.4 Alternatives Considered

The infrastructure requirements are specific to the content of the Common Strategic Part 1 for Local Plans and no other alternatives can be considered reasonable. It can be considered that alternatives could only regard different permutations of alternatives explored within this SA, in particular those Spatial Strategies and Garden Communities explored within this SA and

considered in the plan-making process: the permutations of which are too numerable to be considered in any detail.

6.6.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

6.7 Policy SP5 - Place Shaping Principles

6.7.1 Context / Justification

New development must reflect high standards of urban and architectural design. It must also be functional and viable. Major new developments will be planned carefully with the use of masterplans and design codes where appropriate.

This requirement for high design standards will apply to public and private buildings across all scales of development as well as to infrastructure projects. Enhancements to the public realm, landscaping measures and attention to architectural detail will be important features that the authorities will wish to see included in new developments. Strategic scale and more local green infrastructure can make a vital contribution to quality of place, biodiversity and health outcomes.

The policy is as follows:

POLICY SP5 – PLACE SHAPING PRINCIPLES

All new development must meet the highest standards of built and urban design. The local authorities encourage the use of development frameworks and masterplans and will use design codes where appropriate for strategic scale developments.

All new development should reflect the following principles:

- Respond positively to local character and context to preserve and enhance the quality of existing communities
- Provide buildings that exhibit individual architectural quality
- Create well-connected places that prioritise the needs of pedestrians, cyclists and public transport services above use of the private car
- Where possible, provide a mix of land uses and densities with well-defined public and private spaces
- Enhance the public realm through additional landscaping, street furniture and other distinctive features that help to create a sense of place
- Provide streets and spaces that are overlooked and active and promote inclusive access
- Include parking facilities that are well integrated as part of the overall design
- Provide public open space or larger scale green infrastructure
- Include measures to promote environmental sustainability including addressing energy and water efficiency and
- Protect the amenity of existing and future residents and users with regard to noise,
 vibration, smell, loss of light or overlooking

Temporal Sustainability Objectives (SO) Impacts 7 1 2 4 5 6 8 9 10 11 12 13 14 15 **Short** ++ ++ ++ ++ +/? N/A N/A N/A 0 N/A Medium ++ ++ ++ ++ N/A N/A N/A +/? 0 N/A + + Long ++ ++ ++ ++ +/? N/A N/A N/A N/A

Table 13: Impact on Sustainability Objectives: Policy SP5

6.7.2 Significant and Temporal Effects

There will be significant positive impacts resulting from the Policy on aspirations regarding community safety (SO1), sustainable travel (SO6), accessibility (SO7) and water quality (SO11). Minor positive impacts will be realised for health (SO3) through public open space requirements, the natural environment (SO5) through green infrastructure, townscapes (SO9) and energy efficiency (SO10).

The Policy could be more explicit as to the requirements of new development in regards to the historic environment and assets (SO9) and also possible biodiversity gain (SO5). The Policy could also respond to aspirations to increase renewable energy generation (SO10) in strategic scale development opportunities. There is also scope for the policy to include principles related to surface water flood risk (SO12) and in particular SuDS; for this reason uncertain impacts have been highlighted at present. It should be acknowledged however that significant positive impacts can be expected to arise from relevant individual LPA Local Plan policies, which can also respond better to requirements for local distinctiveness in that context.

6.7.3 Secondary Effects

There will be secondary positive impacts regarding transport related air quality (SO13) through requirements that development prioritise the needs of pedestrians, cyclists and public transport services above use of the private car.

6.7.4 Alternatives Considered

In so far as the place shaping principles of the Policy reiterate sustainable land use requirements as espoused in the NPPF and NPPG, it is considered that there are no reasonable alternative approaches that could be considered distinctively different yet still meet tests of soundness.

6.7.5 Proposed Mitigation Measures / Recommendations

Policy SP5 could be more explicit as to the requirements of new development in regards to the historic environment and assets and also possible biodiversity gain through green infrastructure. The Policy could also respond to aspirations to increase renewable energy generation in strategic scale development opportunities. There is also scope for the policy to have regard to surface water flood risk and in particular SuDS.

6.8 Policy SP6 – Spatial Strategy for North Essex

6.8.1 Context / Justification

Future growth will contribute to maintaining and enhancing a well-connected network of sustainable settlements across North Essex. New homes, jobs, retail and leisure facilities serviced by new and upgraded infrastructure will be accommodated as part of existing settlements according to their scale, sustainability and role. The countryside will be protected and enhanced.

For the majority of settlements these issues are addressed in the second part of the Local Plan dealing with each authority's area. However, it is relevant here to set out the spatial strategy at an appropriate level, as it relates to the main settlements and strategic-scale new development.

- In Braintree District the growth will be a mixture of urban extensions and new communities. Braintree town, as the largest service centre in the District, will have a number of new urban extensions. Over 4,000 homes will be allocated in this area. The other main focus for development will be the A12 corridor with the main town of Witham and service villages of Hatfield Peverel, Kelvedon and Feering with allocations of just over 2,000. Other parts of the District, including the town of Halstead, will have smaller allocations to reflect a more local need and making the best use of brownfield sites, recognising that these areas are not as sustainable. Two new garden communities located on the A120 on the eastern and western edge of the District will provide at least 3,500 new homes within the Plan period, as well as the facilities and employment land to support them. These garden communities will continue to grow providing a key source of housing and jobs growth into future plan periods.
- In Colchester, the urban area of Colchester will continue to be a focus for growth due to its pre-eminent role as a centre for jobs, services and transport, with 4,000 units expected to be delivered over the Local Plan period. The urban area of Colchester, however, has a limited and diminishing supply of available brownfield sites, so new settlements will be included in the spatial hierarchy as a sustainable option for further growth of homes and jobs. Approximately 1,200 homes will be allocated in the Rural District Centres of Tiptree, West Mersea and Wivenhoe. Smaller sustainable settlements will receive limited allocations proportionate to their role in the spatial hierarchy.
- In Tendring the spatial hierarchy promotes growth in settlements that are the most assessable to the strategic road network, public transport and offer a range of services. Clacton, the Colchester Fringe and Harwich with Dovercourt are classified as strategic urban settlements and will accommodate around 5,000 new homes. The smaller urban settlements of Frinton with Walton and Kirby Cross, Manningtree with Lawford and Mistley, Brightlingsea and the expanded settlement of Weeley will accommodate between 1,500 and 2,500 new homes. The rural service centres and smaller rural settlements will accommodate around 1,500 new homes including a windfall allowance. Each of the strategic and urban settlements, and to a lesser extent the other settlements, will accommodate a share of 40 hectares of employment space, with infrastructure and services to accommodate the growth.

The policy is as follows:

POLICY SP6 – SPATIAL STRATEGY FOR NORTH AND CENTRAL ESSEX

Existing settlements will be the principal focus for additional growth across North Essex. Development will be accommodated within or adjoining settlements according to their scale, sustainability and existing role both within each individual district and, where relevant, across the wider strategic area.

Future growth will be planned to ensure settlements maintain their distinctive character and role, and to avoid coalescence between them. Re-use of previously-developed land within settlements is an important objective, although this will be assessed within the broader context of sustainable development principles, particularly to ensure that development locations are accessible by a choice of means of travel.

New development will be focused on the principal settlements in each district. Below this level, each local authority will identify a hierarchy of settlements where new development will be accommodated according to the role of the settlement, sustainability, its physical capacity and local needs.

Beyond the main settlements the authorities will support diversification of the rural economy and conservation and enhancement of the natural environment.

Three new garden communities will be developed as part of the sustainable strategy for growth at the locations shown on Map 3.3. These new communities will provide strategic locations for 7,500 additional homes within the Plan period as well as accompanying employment development, with expectation that substantial additional development will be delivered beyond the current Local Plan periods. They will be planned and developed on garden communities principles, with necessary infrastructure and facilities provided and a high quality of built and urban design.

6.8.2 Appraisal of the Principles behind the Spatial Strategy

The implications of Policy SP4 on the requirement for Sustainability Appraisal to assess all reasonable alternatives are two-fold. Firstly, the appraisal of the general spatial strategy is explored, alongside reasonable alternatives.

Table 14: Impact on Sustainability Objectives: Policy SP6 – the Principles behind the Spatial Strategy

Temporal	Sus	tainat	oility (Object	tives	(SO)									
Impacts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	+	++	+	++	+	+	++	+/?	+/?	0	N/A	N/A	+/?	+	N/A
Medium	+	++	+	++	+	+	++	+/?	+/?	0	N/A	N/A	+/?	+	N/A
Long	+	++	++	++	+/?	++	++	++	+	+	N/A	N/A	+	+/?	N/A

6.8.3 Significant and Temporal Effects of the Principles behind the Spatial Strategy

It should be noted that the spatial strategy, as set out in the policy and supporting text, is the preferred option at this time. However if further evidence or work reveals that one or more garden community is not deliverable or viable in the way that meets with policies set out for the Garden Communities (see Policies SP7-10), then other options will be explored.

The principles behind the Spatial Strategy will have a large number of significant positive impacts on the Sustainability Objectives, most notably on those that correspond to housing delivery (SO2), economic growth (SO4) and accessibility (SO7). The short and medium term impacts of these are related to the notion that development will be accommodated within or adjoining settlements according to their scale and existing role both within each individual district; these correspond to the NPPF requirements of each LPA in the formulation of a Local Plan and offers a local distinctiveness to the strategic area relevant to local needs and communities. Significant long term impacts are different in that they correspond to the requirement for Garden Communities in the latter stages of the plan period to meet unmet or residual needs in a sustainable manner and in sustainable locations.

Further long term significant positive impacts associated with Garden Communities can be expected to be realised on health (SO3), through the integration and requirement of suitable facilities and open space and recreation requirements; sustainable travel (SO6) through the requirements of sustainable transportation means to be provided, and education and skills (SO8) through the provision of primary, secondary and early years facilities as per Garden City Principles and Essex County Council infrastructure requirements. Minor positive impacts can be expected through Garden Community developments associated with townscapes (SO9) through a combined alleviation of pressures on existing settlements at the expected scale and also in conjunction with design expectations and opportunities. This focus away from the expansion of existing settlements will also not alleviate air quality pressures in settlements (SO13) and also offer opportunities for renewable energy generation (SO10). Despite this, uncertain impacts can be expected to arise from the principle of Garden Communities regarding the natural environment (SO5) and landscapes (SO14) through the development of green field land, however it should be acknowledged that at the specified scale, and commensurate with the density requirements of Garden City Principles, Garden Communities are capable of mitigating such concerns effectively and can even lead to opportunities regarding biodiversity gain.

Areas of short to medium term uncertainty relate to the school capacity pressures (SO8) experienced within many of the strategic area's existing settlements, and a lack of available land in many instances to meet the thresholds required for school expansion or provision. In addition, focusing development to existing settlements may also conflict with the conservation objectives of preservation and enhancement within historic cores and areas. A focus on existing settlements can also be expected to exacerbate air quality issues associated with town centres and urban junctions. Despite these impacts however, the NPPF requires the authorities' Local Plans to contain specific policy requirements to alleviate such impacts in the first instance and otherwise seek appropriate mitigation measures. It should also be noted that a range of positive impacts can be anticipated from focusing development in such centres, particularly those related to social and economic objectives and those that seek to protect the natural environment.

The sustainability implications of these Garden Communities (and alternative options) are explored in more detail in the second part of this appraisal of Policy SP6.

6.8.4 Secondary Effects of the Principles behind the Spatial Strategy

Positive secondary effects can be expected to affect the majority of the sustainability objectives in line with their combined reflection of sustainable aspirations within the strategic area and also each authority.

6.8.5 Alternatives Considered of the Principles behind the Spatial Strategy

The preferred Spatial Strategy across the strategic area has been devised in conjunction with those of the Local Plans of the three authorities of Colchester, Braintree and Tendring. Although the scope of the Strategic Common Part 1 for Local Plans is strategic, elements of the Spatial Strategy above can be seen to be non-strategic as per the remit of the three authorities' Local Plans. It should be acknowledged however that additional Spatial Strategy options may be reasonable within the wider area. For the purposes of identifying and assessing reasonable options within the SA, component parts of the preferred spatial strategy have been initially explored and expanded as sole scenarios for delivering and distributing growth across the strategic area. The following alternatives represent a list of possible reasonable options:

- Alternative 1 A focus on allocating all broad Garden Community options proposed in the Strategic Area
- Alternative 2 A focus on existing settlements, commensurate to proportionate growth across the Strategic Area.
- Alternative 3 A focus on stimulating infrastructure and investment opportunities across the Strategic Area

In addition to the above, a fourth alternative was submitted to the North Essex Authorities for consideration as a spatial strategy option across the HMA. The Campaign Against Urban Sprawl in Essex (CAUSE) has created a vision for growth which aims to ensure that houses are built in the right place. This alternative, referred to as 'CAUSE's Metro Plan' seeks to deliver infrastructure first, making use of a rail asset which can offer a frequent metro service. The proposal looks at housing and related growth for Colchester and Tendring, based on the Colchester to Clacton line, and to some extent the Walton branch. The Colchester-Clacton rail corridor would accommodate a substantial amount of housing growth, estimated at 6,000 – 8,000 homes (or 7,000 – 9,000 homes if higher densities are felt to be acceptable at the heart of these settlements), depending on land constraints. This rail-based growth would be distributed between the station catchment area of Alresford, Great Bentley, Weeley, and Thorpe le Soken.

Alternative 4 – CAUSE's Metro Plan

All alternatives have been appraised as follows:

Temporal	Sustainability Objectives (SO)														
Impacts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Alternative	1 - A	focus	on al	locati	ng al	l Gard	den C	omm	unity	optio	ns				
Short	+	+/?	+	+/?	+	+	++	+/?	+/?	0	N/A	N/A	+/?	+	N/A
Medium	+	+/?	+	+/?	+	+	++	+/?	+/?	0	N/A	N/A	+/?	+	N/A
Long	+	++	++	++	+/?	++	++	++	+	+	N/A	N/A	+	+/?	N/A
Alternative across the				cistin	g sett	lemei	nts, c	omme	ensur	ate to	prop	ortio	nate ç	jrowt	h
Short	+/?	++	-	++	+	+	++	+/?	+/?	0	N/A	N/A	+/?	+	N/A
Medium	+/?	+	-	+	+	+	+	-	+/?	0	N/A	N/A	-	+	N/A
Long	+/?	-	-	-	+	+	+/?		+/?	0	N/A	N/A		+	N/A
Alternative the Strateg			on st	imula	iting i	infras	tructi	ıre ar	nd inv	estmo	ent op	portu	unitie	s acr	oss
Short	+	-	+/?	-	+	+	++	+/?	+	0	N/A	N/A	+/?	+	N/A
Medium	+		+/?	-	+	+	++	+/?	+	0	N/A	N/A	+/?	+	N/A
Long	+	++	++	++	+/?	++	++	++	+	+	N/A	N/A	+	+/?	N/A
Alternative	4 – C	AUSE	's Me	tro Pl	an: C	olche	ster -	- Clac	ton N	letro	Optio	n			
Short	+	+/?	+/?	+/?	+/?	+	‡	+/?	+/?	0	N/A	N/A	+	+/?	N/A
Medium	+	+/?	+/?	+/?	+/?	++	++	+/?	+/?	0	N/A	N/A	+	+/?	N/A
Long	+	+/?	+/?	+/?	+/?	++	++	+/?	+/?	0	N/A	N/A	+	+/?	N/A

Alternative 1 – Although this alternative could offer some perceived benefits in terms of long term infrastructure provision in principle, it would not respond to the need for a distribution of growth across existing settlements (i.e. the centres of largest population per District/Borough) and meeting identified needs regarding affordability in all areas. In addition, the general distribution of options would see an overprovision in the Colchester area, and would create housing and employment inequalities across the strategic area. Impacts can be expected to be similar at the broad strategic level, however in line with the housing requirements of the Strategic Area, the short to medium term impacts could be expected to be uncertain on housing (SO2) and employment (SO4) related objectives in so far as the needs of existing communities would unlikely be met. For this reason, and in relation to the existing sustainability of focusing development within the capacity of existing settlements, the alternative has been rejected.

Alternative 2 – Although on the face of it over a wide Strategic Area this would appear a sustainable option, this alternative would require the formulation of a joint or combined settlement hierarchy. The appraisal of this alternative has been undertaken on the basis that existing settlements would have to respond to allowing higher densities and the development of more marginal peripheral land. This has seen a large amount of diminishing impacts associated with this continual albeit theoretical trend, culminating in a large amount of uncertain and negative impacts in the long term, when Garden Communities would be coming forward to meet unmet housing and employment needs. The alternative would not correspond to the Local Plan requirements of the NPPF on a LPA basis, and could lead to the overexpansion of some settlements through the possible development of unsuitable extensions with no wider sustainable or infrastructure benefits. Strategically, it would also not offer a sustainable distribution across the wider area, or reflect that some settlements within the Strategic Area serve an important function in terms of services despite not having a significant population. For these reasons the alternative has been rejected.

Alternative 3 – The location of the preferred Garden Community options in the Strategic Area could be perceived as being located in line with a need to stimulate investment in transport infrastructure along the A120. In addition, their size indicates the threshold required to deliver a new secondary school in each instance. To entirely focus on the premise of distributing growth to the A120 and in order to deliver additional secondary school capacity in the wider area would not be a sustainable one, in so far as it would not take into consideration the benefits and indicative impacts associated with other themes and tenets of sustainability, in particular those that are environmental in nature and seek to protect such assets. To extend the premise further to other infrastructure requirements across the strategic area would not ensure Garden Communities meet Garden City Principles and infrastructure requirements in less marketable areas could be expected to warrant notions of housing and employment delivery unviable. Although infrastructure considerations partly represent the case for their preferred status, it should be acknowledged that the preferred Garden Community options represent the most sustainable options in their own right as well as in consideration of their distribution as part of a wider Spatial Strategy. In line with the housing requirements of the Strategic Area, the short to medium term impacts could be expected to be increasingly negative on housing (SO2) and employment (SO4) related objectives in so far as the needs of existing communities would unlikely be met until the long term; Garden Communities require by their nature and scope a significant amount of time to meet the requirements of Garden City Principles and cannot be expected to be immediately available or achievable. This is also true for impacts on other relevant Sustainability Objectives in the short and medium term.

Alternative 4 – This alternative has been deemed as having likely negative impacts due to the focus of growth in Tendring, the least marketable District within the HMA. In addition, the alternative is not clear how the geographic distribution will benefit from the economies of scale of a fewer amount of larger Garden Communities; for this reason no long term impacts have been identified. There is also the potential for cumulative negative impacts on environmental considerations associated with the distribution, especially regarding increasing visitor numbers to the coast and international designations. It should be acknowledged however that a forthcoming HRA or AA would add further detail to these impacts should the option become preferred. The alternative will have significantly positive impacts associated with sustainable transport and accessibility; however it should be acknowledged that the upgrading of multiple rail stations on the same stretch of line would likely have negative implications regarding the deliverability of multiple new settlements in the plan period. The alternative seeks to provide a transit-oriented solution which supports the local economy and helps to ease congestion on our over-crowded roads. The alternative would focus new housing development in line with growth at the existing railway

stations of Alresford, Great Bentley, Weeley and Thorpe-le-Soken, with potential new station growth points in-between Alresford and Great Bentley and in between Thorpe-le-Soken and Clacton. In consideration of the OAN Report, it could be considered that this distribution would not meet the existing needs of Braintree District; in particular the requirements to ensure affordable housing and jobs in a range of sectors that could be expected from new Garden Communities in the District. The strategic option could be argued as not contributing to Braintree District Council, as a LPA, meeting its Local Plan requirements as set out in the NPPF; particularly in regard to the presumption in favour of sustainable development that states that local planning authorities should positively seek opportunities to meet the development needs of their area. The alternative does not consider the lack of available land within the stated focal points for growth in Tendring. It also does not consider the suitability of land, especially in regard to alternative sites. As stated in the appraisal of housing numbers in this SA, work towards agreeing a housing requirement undertaken by Tendring District Council for the purposes of their Local Plan calculates that capacity exists for 550 dwellings per annum. This has been evidenced by extant planning permissions, windfall allowances, submitted sites in the LPAs call-for-sites process as deemed suitable, achievable and available in their SHLAA and in conformity to their settlement hierarchy. For these reasons this alternative has been rejected.

6.8.6 Proposed Mitigation Measures / Recommendations of the Principles behind the Spatial Strategy

No mitigation measures or recommendations are proposed at this stage.

6.8.7 Appraisal of the Garden Community Options within the Spatial Strategy

As previously mentioned, the implications of Policy SP6 on the requirement for Sustainability Appraisal to assess all reasonable alternatives are two-fold. This sub-section explores the specific assessment of Garden Community options within the policy, alongside reasonable alternatives.

Alternatives have been identified through the three authorities' respective Local Plan call-for-sites processes. The threshold for the identification of what constituted a reasonable Garden Community option was 4,000 dwellings based on that of the threshold for the required provision of a new secondary school; a key building block for a community of sufficient scale for residents to meet majority of day to day needs.

The following represent all of the Garden Community options that were proposed by developers / landowners within the Strategic Area (please note that the indicative yields presented are for each option in its entirety and beyond those which can be delivered in the Plan period as specified in Policy SP6):

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection	
East Colchester	Option 1: Southern Land Focus	GCEC1	- 6,611 homes - 7 ha mixed use - 5 ha employment land	The broad area of East Colchester has been selected as a preferred option for a new Garden Community due	
	Option 2: A133 to Colchester - Ipswich rail line	GCEC2	- 8,834 homes - 10 ha mixed use - 5 ha employment land	to its ability to stimulate required infrastructure delivery and adhere to Garden City Principles in a largely unconstrained area.	
	Option 3: North to South wrap	GCEC3	- 11,409 homes - 13 ha mixed use - 7 ha employment land		
North Colchester	Option 1: East of Langham Lane focus	GCNC1	- 6,606 homes - 7 ha mixed use - 7 ha employment land	The broad area of North Colchester has been rejected as a preferred option for a new Garden Community due to the limited scope for maximum sustainable benefits associated with adhering to Garden City principles. The broad area of West of Colchester / Marks Tey has been selected as a preferred option for a new Garden	
	Option 2: Maximum Land Take	GCNC2	- 10,132 homes - 10 ha mixed use - 10 ha employment land	maximum sustainable benefits associated with adhering to	
West of Colchester /Marks Tey	Option 1: North and South of A12 / Rail Corridor Focus	GCWC1	- 16,861 homes - 9 ha mixed use - 10 ha employment land	Colchester / Marks Tey has been selected as a preferred option for a new Garden	
	Option 2: South of A120 and North of Marks Tey Existing Settlement	GCWC2	- 17,182 homes - 9 ha mixed use - 11 ha employment land	The broad area of North Colchester has been rejected as a preferred option for a new Garden Community due to the limited scope for maximum sustainable benefit associated with adhering to Garden City principles. The broad area of West of Colchester / Marks Tey has been selected as a preferred	
	Option 3: South of A120 Focus	GCWC3	- 13,105 homes - 7 ha mixed use - 9 ha employment land	unconstrained area.	
	Option 4: Maximum Land Take	GCWC4	- 27,841 homes - 16 ha mixed use		

Option	Sub-Option	Reference number for purposes of assessment	Indicative dwelling yield and amount of mixed use / employment land (ha)	Reason for selection / rejection
			- 15 ha employment land	
West of Braintree	Option 1: Braintree DC only Option 2: Braintree DC and Uttlesford DC Land	GCWB2	- 9,665 homes - 12 ha mixed use - 10 ha employment land - 12,949 homes - 16 ha mixed use - 13 ha employment land	The broad area of West of Braintree has been selected as a preferred option for a new Garden Community. As Uttlesford District Council are not currently contributing to the work undertaken by the North Essex Authorities, and are located within a different Housing Market Area, option GCWB2 can be rejected at this stage in so far as the option does not respond to the scope and context of the Common Strategic Part 1 for

The appraisal of the Garden Community Options has been undertaken using all available information, including the findings of a Site Options and Performance Review undertaken by consultants AECOM, who have been commissioned to undertake a concept feasibility study on behalf of the North Essex Authorities.

The following table sets out the appraisal of all the Garden Community options in the Strategic Area.

Table 15: Impact on Sustainability Objectives: Policy SP6 – the Garden Community Options (including Alternatives)

Sustainability Objective	East C	olcheste	r	North Colche	ester	West o Tey	f Colche	ester / Ma	arks	West o Braintr	
	GCE C1	GCE C2	GCE C3	GCN C1	GCN C2	GCW C1	GCW C2	GCW C3	GCW C4	GCW B1	GCW B2
Physical Limitations – Absence of insurmountable problems (e.g. access, ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	+/?	+/?	+/?	-	-	+/?	+/?	+/?	+/?	+	+

Commentary:

Regarding option GCEC1, and as stated in the AECOM Site Options and Performance Review, access will be dependent on the A120 and A133 and requires an access strategy that manages interface between local and strategic traffic and restricts use of through routes across the site to move between the A120 and A133. The proposed link road to the west of the eastern boundary would be a critical aspect of this strategy that needs to be confirmed. It would also be difficult to achieve any direct vehicular access into Greenstead from the site; Bromley Road would also only provide limited access options given town centre congestion issues south and the fact there is no junction with the A120. Despite these considerations, the scale of the proposal has a reasonable prospect of overcoming them in meeting Garden City Principles. This is also the same for options GCEC2 and GCEC3, with the added consideration of the Great Eastern Mainline creating severance / bisecting movements to the North West (and south in regard to GCEC3); however there are three vehicular bridges in place which could be upgraded to accommodate requisite movements. In regard to other physical limitations, all options have the same considerations regarding topography; valley slopes following Salary Brook that can be utilised as green infrastructure. Similarly are impacts regarding surface water, waste water, gas and electricity largely indistinguishable across all options. Surface water networks are at capacity, the Colchester Water Recycling Centre is near capacity (but can be expanded in response to developer demand) and gas and electricity network reinforcement would also be needed. None of these limitations can be considered insurmountable of any proposal at the scale of the three options.

The AECOM Site Options and Performance Review states for both North Colchester options (GCNC1 and GCNC2), that site access will be reliant on the A12 and significant consideration will need to be given to how any Garden Community would relate to the A12, particularly in developing strategies which form an appropriate interface between the A12 and local roads. There will be a need to restrict unnecessary traffic flows which could increase congestion along this strategically important route. The functionality of any forthcoming development will be dependent upon bridging and facilitating sustainable linkages across the A12 connecting with Colchester to the south. The AECOM report adds that GCNC2 could however benefit from an opportunity to access links with Straight Road which may provide greater flexibility in relation to the overall highway and related transport network for the new settlement as well as greater spread of traffic demand. It adds that the option is likely to rely on these further connections, because the links associated with GCEC1 are only likely to

Sustainability Objective	East Colchester		North Colche	ster	West of Tey	f Colche	ster / Ma	arks	West of Braintr		
	GCE	GCE	GCE	GCN	GCN	GCW	GCW	GCW	GCW	GCW	GCW
	C1	C2	C3	C1	C2	C1	C2	C3	C4	B1	B2

accommodate a finite volume of traffic given current constraints in the area. Both options for North Colchester have a potentially significant constraint in the form of a 20 hectare Solar Farm within both areas, which exists with a 20 year planning permission. Although this could represent a benefit in regard to renewable energy generation for any new Garden Community, it equally constrains the options in regard to conforming to a number of wider Garden City Principles, particularly those related to high quality design and layouts, and green infrastructure which are not fragmented or limited in the scope of aspirations at the masterplanning stage. For this reason, negative impacts have been identified in so far as the options are unlikely to meet wider Garden City Principles. It should be noted that it may be possible that any forthcoming masterplan could be developed to overcome such limitations. In addition, Anglia Water have also identified major constraints in terms of providing infrastructure and/or treatment works to serve proposed growth at this location.

The AECOM Site Options and Performance Review states that road infrastructure and junction access and capacity represent the main barriers to development, however it should be noted that the presence of the A12 and A120 are beneficial to development in this location providing local and regional connectivity. In addition, new highway infrastructure of a planned 3-lane widening of the A12 and the duelling of the A120 from Braintree to the A12 (incorporating a potential bypass of Marks Tey) would make the principle of development in this location viable for further exploration. Despite this, a significant transport infrastructure programme would be needed for all options to overcome localised connectivity issues surrounding an east/west severance due to the alignment of the A12 and Great Eastern Mainline rail route; however any successful proposal can be expected to offer significant wider benefits. This is a general issue surrounding all of the West Colchester / Marks Tey options; however they can reasonably be expected to increase commensurate to increasing scales. Other physical limitations for all options include the possible need to relocate and expand the Marks Tey rail station; however the presence of an existing rail station merits this exploration and strategic scale growth at this broad location. All options have underground and overhead pipeline and cable routes which would likely require retention and the development of exclusion zones. These issues, and other considerations such as areas of Flood Risk Zone 3 in the broad area, are not considered insurmountable at the scale of growth explored for all options.

The AECOM Site Options and Performance Review states that both sites to the West of Braintree are away from the A120 and served from small rural lanes only, providing limited connectivity to the broad area. In addition, one such lane, 'Pods Lane' is a designated Protected Lane which, as a heritage asset, would likely need to be integrated into any new Garden Community. Site access would generally be dependent on the A120 and B1256 from the south and limitations surrounding the allocated minerals site. An upgrade of the junction of the B1256 and Blake End would create a new access spur that avoids the quarry and is in principle considered possible. The AECOM report adds that overall, development of the broad area would require an access strategy that manages the interface between local and strategic traffic and restricts us of the rural lane network. Option GCWB2, in addition to these general considerations, may require additional solutions due to its larger scale of development. Regarding other physical limitations, both sites are considered relatively free of constraint, apart from those hedgerows, field ditches and woodland that can be integrated into any forthcoming masterplan.

2. Impacts – Acceptable impacts on high quality agricultural land,	+/?	+/?	+/?	-	-	+/?	+/?	+	-	+/?	+/?	l
important landscape features, townscape features, sites of nature												l

Sustainability Objective			North Colche	ster	West of Tey	f Colche	arks	West of Braintree			
	GCE C1	GCE C2	GCE C3	GCN C1	GCN C2	GCW C1	GCW C2	GCW C3	GCW C4	GCW B1	GCW B2
conservation interest and heritage assets											

Commentary:

Options GCEC1, GCEC2 and GCEC3 all contain Grade 1 Agricultural Land (determined 'excellent' by Natural England) along much of the eastern boundary, however the requirements for a belt of countryside to prevent sprawl has scope for its protection. The existing natural landscape and ecological features within the options such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches, if protected, conserved and enhanced, have the potential to form key landscape structuring components of the Garden Community and related green infrastructure network. Although these features could be considered constraints, such an established network would be considered a considerable benefit to the wellbeing of future communities, and it should be noted that the features enable the option to adhere positively to Garden City Principles, particularly those in relation to a surrounding belt of countryside and the integration of well-connected biodiversity gains. For the purposes of comparison, those options with a larger scope have the both the potential for larger constraints and opportunities, although it should be noted that GCEC3 contains a SSSI (Bullock Wood) which is likely to require more sensitive consideration in regard to preservation and enhancement as part of a belt of countryside to prevent coalescence with Colchester. All options have a number of Listed Buildings across the options which should be preserved and the topography of the land indicates benefits to the proposals in the form of integrating development into a natural context.

Options GCNC1 and GCNC2 both include large areas of land identified as Grade 2 Agricultural Land, classed as 'very good' by Natural England, with GCNC2 having an additional proportion of Grade 1 'excellent' Agricultural Land. The sites both have issues surrounding Listed Buildings and their settings; however there are not considered to be any insurmountable issues regarding development at either scale. Although ecological assets exist throughout, both sites do not contain any wildlife designations, and so have scope to introduce these within proposals in conformity to Garden City principles. The landscape implications of both sites are considered significant; the eastern boundary of both sites border the Dedham Vale AONB and a development of this size has the potential to significantly impact on the character and setting of this designation. It should also be considered that any potential extension of the AONB westward may be impacted by development at both these options. Due to the proximity of the AONB, impacts for both options have been considered negative, although do factor in the possibility that mitigation may be possible in line with the current boundary extent of the AONB.

Options GCWC1, GCWC2 and GCWC4 all include land that is identified as Grade 2 Agricultural Land; classed as 'very good' by Natural England. Of these options, GCWC3 can be seen to offer a smaller proportion of development on Grade 2 ALC, with development expected to occur on Grade 3 ALC which is of a lesser quality. Options GCWC1, GCWC2 and GCWC4 also contain the Marks Tey Brickpit SSSI, however its location at the north east boundary in each instance ensures that this designation can be protected and enhanced through the requirements of a surrounding belt of countryside to prevent sprawl. Option GCWC3 does not have any implications in this regard, although detailed proposals would have to be sensitive to the presence of Domsey Brook. Options GCWC2 and GCWC4 are in close proximity to a Scheduled Monument (a Roman villa 450m south of Warren's Farm to the north)

Sustainability Objective	East Colchester		North Colche	ster	West of Colchester / Marks Tey					of ree	
	GCE	GCE	GCE	GCN	GCN	GCW	GCW	GCW	GCW	GCW	GCW
	C1	C2	C3	C1	C2	C1	C2	C3	C4	B1	B2

and could affect the setting of this asset, however the specific impacts of the options, and their significance, would have to be subject to specialist assessment once more detailed masterplanning is forthcoming (and should these options be selected). Option GCWC1 does not extend as far north west in proximity to the Scheduled Monument as Options GCWC2 and GCWC4 as to warrant the same expected level of potential impact; however the same issues would have to be investigated. Option GCWC3 is assessed as unlikely to impact on this designation. All the options contain a small number of Listed Buildings, in reflection of the size of the proposals, and although impacts on their setting would have to be further investigated, it is believed that at this strategic level, the scope of all proposals ensures that impacts can be avoided. The landscape implications of the proposals vary commensurate to the scale of each proposal, with GCWC4 expected to have more significant impacts as GCWC1 and GCWC2, and GCWC3 expected to have minimal impacts in comparison to all the other options. The landscape character of the broad area is not particularly sensitive to change, with limited views associated with medium to large field patterns and mature hedgerows. The impacts expected from each option are indicative of their scale in each regard, and as such a range of impacts have been highlighted in this appraisal. Nevertheless, it should be noted that at the each options' scale, mitigation can be expected to be possible.

Options GCWB1 and GCWB2 both include land that is identified as Grade 2 Agricultural Land; classed as 'very good' by Natural England. Both options also include land allocated for minerals development within the adopted Minerals Local Plan (MLP). This land, in the south east portion of both options, is also identified as a flagship restoration scheme as part of MLP Policy S12; as a result, measures already exist to increase biodiversity gain on the site, and there are no perceived incompatibilities of this with the requirement of both GCWB1 and GCWB2 to provide a belt of countryside to prevent urban sprawl. GCWB2 includes the designation of Boxted Wood, a LoWS and Ancient Woodland whereas GCWB1 extends to its eastern extent. Due its location, and the requirement of the belt of countryside previously mentioned, the location of Boxted Wood is not considered an insurmountable issue to either option, however it is recommended that measures to conserve and enhance are sought through any eventual masterplanning, particularly for GCWB2. The northern boundary of both options also abuts the Conservation Area of Great Saling which contains a range of listed buildings including grade II as well as the Registered Park and Garden of Saling Grove. Once more it is perceived that impacts are unlikely to be insurmountable and that the preservation or even enhancement of the setting of these heritage assets can be ensured through adherence to Garden City Principles. GCWB2, in regard to its inclusion of the Great Saling airfield may also have archaeological implications, however further detail would be required as to the potential future of the airfield in any forthcoming masterplan.

3. Environment/Amenity – Acceptable relationship with and impact on occupiers of existing properties and neighbouring areas/towns (maintaining adequate separation)



Commentary:

Sustainability Objective	East Colchester		North Colche	ster	West of Colchester / Marks Tey					of ree	
	GCE	GCE	GCE	GCN	GCN	GCW	GCW	GCW	GCW	GCW	GCW
	C1	C2	C3	C1	C2	C1	C2	C3	C4	B1	B2

Options GCEC1 and GCEC2 will have similar positive impacts associated with the topography of the area constraining views into and across the sites, which are assessed as reducing the visual impacts of any Garden Community. The existing Local nature Reserves of Salary Brook and Welsh Wood create the basis of an established and high quality buffer between Colchester and any new Garden Communities to the west, and there are no other existing settlements to the east that would be affected by any of the options at their stated scales. Option GCEC3 has additional considerations to take into account regarding the A137 Harwich Road which bisects the small settlement of Fox Street. Maintaining a clear separation of this settlement may fragment the wider development, in particular that area to the north of the railway line. For that reason, impacts are not highlighted as positively for this option.

Options GCNC1 and GCNC2 have slightly differing impacts, associated with the impact on the existing settlements of Langham to the north (in regard to GCNC1) and also to the linear development to the west (in regard to GCNC2). In consideration of the location and size of the Solar Farm existing at Boxted Airfield, it is uncertain to what extent option GCNC1 could adequately ensure a degree of separation with Langham whilst simultaneously ensuring that wider Garden City Principles are met, where the extent of land available for housing and employment delivery is uncertain at this current time and over the plan period. It is understood that the promoter of the site for development could remove the solar farm upon expiry of its consent, with the land then developed for housing; however in the interests of sustainability, the removal of a renewable energy facility could not be considered positive. Option GCNC2 does not have such significant considerations, however, extends further west. Regarding the southern boundary of both options, it is likewise uncertain how separation can be guaranteed with Colchester and the Northern Gateway when considered alongside the need for such links to be forged to the benefit of the wider community and particularly for access and public transport links. Regarding this, it can be considered that these options are unlikely to benefit from a degree of separation from Colchester, which would adhere to this sustainability objective and corresponding Garden City Principle, and any resultant masterplanning would have to careful balance these separate requirements.

Regarding options GCWC1, GCWC2, GCWC3 and GCWC4 there will be varying different implications associated with settlement coalescence; these are largely commensurate to the different scales of the proposals. It should be noted however that coalescence can be prevented in all options with similarly varying degrees of countryside acting as a buffer; a surrounding belt of such being a Garden City Principle to which all options can fully meet. Impacts on the residential amenity of the settlements of Marks Tey and Little Tey however are not as positive with options GCWC1, GCWC2 and GCWC4 possibly assimilating the aforementioned settlements into the Garden Community. A buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities, and it could be considered that the scope for this would be maximised through the larger option GCWC4 with enough available land to have limited knock on effects regarding adhering to other Garden City Principles. Option GCWC3 has been assessed as not having these specific considerations in addition to its required countryside belt protecting any properties to the south.

There are limited numbers of existing residential properties in the area of both options GCWB1 and GCWB2, however the small settlement of Blake End exists to the south west of the site and is located adjacent to a junction corresponding to the likely access to the area from the B1256. It should be noted that assimilation of Blake End is not assumed, in so far as a required belt of surrounding countryside would act as a buffer, however there may be transport implications and perceived loss of amenity in that regard. To the north, both options extend

Sustainability Objective	East C				ester	West of Tey	of Colch	West of Braint			
	GCE C1 C2 C3 C1 C2 C3 C1 C2 C3 C1 C2 C3 C2 C3 C3 C4 C4 C4 C4 C5										GCW B2
preservation of the setting of which is likely to ensure that the new Garelation to GCWB2, additional considerations would be to the amenity insurmountable issue however the presence of Boxted Wood within the	arden Comr y of residen	munity doe nts in Stebb	es not nega oing Green	tively impa and a desi	ct resident ire to ensur	s of the ex re separati	isting settle on. In isola	ement furth tion this is	er to the no	orth. Specif ered an	cally in
4. Transport – Incorporation of integrated and accessible sustainable transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport	+	+	+/?	+/?	+/?	+	+	+	+/?	+/?	+/?

Commentary:

Regarding options GCEC1 and GCEC2, the presence of the Great Eastern Mainline and rail links at Hythe exist as a rapid public transport link to Colchester, ensuring that the principle of ensuring rail links exist; it would be likely however that a new station would be needed, possibly at the University in the south, with interconnecting public transport links integrated into northern parts of both sites. The AECOM report states that existing strategic and local bus networks currently set down and pick-up in close proximity to both sites 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; anticipated to be delivered on the back of the consented 1,500 new dwellings at the site of the former Severalls Hospital. Consultants Jacobs have been instructed by ECC to develop options for a rapid transit system linking the site, University and town centre. The most recent study, entitled 'East Colchester Rapid Transit Option Appraisal Garden Settlement meeting, 6th January 2016' concludes that a Bus Rapid Transit (BRT) would be the most cost effective approach in delivery, rather than a light rail / tram system. A number of possible routes are being explored between the town centre via the Hythe link. Option GCEC3 has been assessed as having the same considerations, however due to the spatial size of the site, it is likely that a further level of site wide connectivity will be required, possibly with the integration of a tram-train connection. For these reasons, impacts are currently assessed as uncertain in line with suitability and viability concerns regarding these additional requirements.

It should be noted that options GCNC1 and GCNC2 do not benefit from an existing rail link and in addition, the sites are severed by the A12 to the south, proving such integration unlikely to be suitable or viable. With this in mind, it can be considered that only bus, walking and cycling opportunities appear valid until further information is known regarding these options. The AECOM Report acknowledges that should bridging of the A12 be possible, or existing bridges be upgraded, then access to wider public transport initiatives would be present to the Northern Gateway. In addition, an existing Park and Ride exists to the west corner of the sites which could be developed. Despite this however, links to the A12 and the strategic road network are likely to prove private car use attractive and it is uncertain whether there will be any benefits to the town centre through bus links only given the proximity and ease of access

Sustainability Objective	East Colchester		North Colche	ster	West of Tey	f Colche	arks	West of Braintr			
	GCE	GCE	GCE	GCN	GCN	GCW	GCW	GCW	GCW	GCW	GCW
	C1	C2	C3	C1	C2	C1	C2	C3	C4	B1	B2

to out of town centres.

The West Colchester / Marks Tey options all benefit from the presence of the Great Eastern Mainline running through the site, and also the existing rail station of Marks Tey. In addition, the infrastructure commitments regarding the A12 and A120 are likely to prove increased bus links suitable and viable options. Despite this, there is a possibility that these infrastructure improvements would warrant sustainable transport means less attractive in favour of private car journeys. Work will however be required to adequately ensure the interconnectivity of the whole site by sustainable means. The AECOM Report states that as an existing settlement, Marks Tey / Little Tey is already connected by public transport - both bus and rail (Marks Tey rail station) to Colchester, Braintree and other centres, including London. This is a clear advantage for developing a sustainable transport system for the Garden Community. It also provides the opportunity to connect the site with and support some form of inter-urban North Essex public transport system, such as Bus Rapid Transit (BRT) or similar. This would be high frequency, connecting key nodes, including the railway station, and creating the conditions to achieve greater modal shift away from the car for local and longer distance trips. Investment in new infrastructure would be required but a good starting point nevertheless exists. The AECOM Report adds, specifically for option GCWC4, that the scale of this option and the constrained location of the existing Marks Tey rail station limits any meaningful expansion of this facility, and it is considered that to provide a fully integrated and accessible sustainable transport system it will be necessary to relocate the railway station to a more central location within the Garden Community. This would also be connected to segregated bus routes, including a potential North Essex BRT, with the opportunity also present to consider a Tram-Train option too, utilising the rail line and re-purposed Sudbury Branch Line. As such, impacts

Options GCWB1 and GCWB2 have been highlighted as having a reasonable option of partially meeting the sustainability objective and associated Garden City Principles. It should be noted that both options do not benefit from an existing rail link and in addition links to the A120 and the strategic road network are likely to prove private car use attractive and it is uncertain whether there will be any benefits to the town centre through bus links only given the proximity and ease of access to Chelmsford and out of town centres such as Freeport. The AECOM report however highlights that connecting the options with Fitchway would provide direct links with Braintree and Braintree Railway Station. The establishment of links south of Fitchway would connect Skyline 120 for employment and Great Notley Country Park for leisure activity. Regarding public transport, the direct access of the site to the A120 can be considered advantageous in terms of connecting the site with North Essex inter-urban bus routes, providing connectivity with Stansted Airport and employment centres and the existing settlement. The opportunity to achieve a development of significant scale with population critical mass may rely on a system with greater connectivity and speed such as a form of BRT, tram or rail, without this inter-urban/inter-regional public transport system, the risk exists that the majority of journeys external and internal to the site would likely be car based in this area.

5. Resilience - Positive contribution towards maintaining resilient town centres and identified regeneration and development priority

Sustainability Objective			North Colche	ster	West of Tey	f Colche	arks	West of Braintree			
	GCE C1	GCE C2	GCE C3	GCN C1	GCN C2	GCW C1	GCW C2	GCW C3	GCW C4	GCW B1	GCW B2
areas and institutions (including Essex University)											

Commentary:

Options GCEC1, GCEC2 and GCEC3 have all been assessed as making a significantly positive impact on the town centre of Colchester, due largely to the options' proximity to the town centre of Colchester, the University and identified regeneration areas in east Colchester. Access to the town centre railway station, accessible from the Hythe station at present and via other public transport means ensures that direct access to the town centre and regeneration areas in the east of the town centre has the potential to be maximised in a sustainable manner.

Options GCNC1 and GCNC2 will have positive impacts associated with distances to the town centre, existing vehicular access and also existing access to park and ride services into the town centre. Impacts are not as significant as east Colchester options due to the lack of rail links and the presence of the Northern Gateway including proposals for this area, which combined with the emergence of an expected district or neighbourhood centre at any Garden Community itself could cumulatively reduce the need for residents to access the town centre for services, convenience retail and leisure facilities.

Options GCWC1, GCWC2 and GCWC3 have been assessed as having positive impacts on the town centre of Colchester, and benefit from existing rail links at Marks Tey which can be expected to be expanded in line with any Garden Community option. Impacts are limited however due to the possibility of residents using the facilities of Tollgate in the first instance as preferable and closer to any Garden Community than the town centre of Colchester. Option GCWC4 has been assessed as having uncertain impacts partly for this reason, but also commensurate to its scale. The level of services and facilities required within this Garden Community option itself should reasonably be expected to be of a suitably large scale in order to be sustainable, however may reduce the number of expected journeys into Colchester for services, convenience retail and leisure facilities.

Options GCWB1 and GCWB2 have been assessed as having uncertain impacts on the town of Braintree. Positive impacts could reasonably be expected due to its close proximity and easy accessibility; however the lack of rail links to the centre and the similarly easy access to the strategic road network could see residents travelling to the larger centre of Chelmsford, or to Freeport to the south of Braintree but physically detached from the town centre.

6. Housing – Provision of a mix of tenures, including affordable	++	++	++	++	++	++	++	++	++	++	++
homes and a range of housing types (including self-build/custom											
build and gypsy and traveller pitches).											

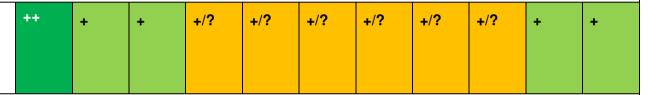
Sustainability Objective	East C			North Colchester		West of Colchester / Marks Tey				West of Braintr	
	GCE C1	GCE C2	GCE C3	GCN C1	GCN C2	GCW C1	GCW C2	GCW C3	GCW C4	GCW B1	GCW B2
Commentary:											
All of the Garden Community Options can be expected to have the sa to relevant Garden City Principles regarding housing supply, type and		•	•		•	ishable in ı	egard to th	e opportur	ities of ead	ch option to	adhere
7. Employment Opportunities – Provision for a wide range of local jobs within easy commuting distance from homes	++	++	++	++	++	++	++	++	++	**	++
Commentary: All of the Garden Community Options can be expected to have broad adhere to relevant Garden City Principles regarding a full range empthis latter consideration, the proximity of existing, and suitable integra	loyment op	portunities	within the	Garden Co	mmunity its	self or withi	n easy con	nmuting dis	stance of h	omes. Reg	arding
8. Mixed-use Opportunities – Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods.	++	++	++	++	++	++	++	++	++	++	++
Commentary:											
All of the Garden Community Options can be expected to have broad adhere to relevant Garden City Principles regarding the inclusion of community of the communi	•		•	•		•	•			es of each (option to

Sustainability Objective	East Colchester		North Colche	ster	West of Tey	f Colche	arks	West of Braintr			
	GCE	GCE	GCE	GCN	GCN	GCW	GCW	GCW	GCW	GCW	GCW
	C1	C2	C3	C1	C2	C1	C2	C3	C4	B1	B2

Commentary:

It can be considered that, in specific relation to relevant Garden City Principles, all of the options have a strong prospect of fully meeting the aspirations of this sustainability objective. All of the Garden Community Options should be viewed as indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles regarding the incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology to ensure climate resilience.

10. Developability / Deliverability - The growth area is available, commercially attractive, and capable of delivering necessary physical/social/green infrastructure and could be viably developed within [6-10] years.



Commentary:

It should be noted that under all options it is understood that the Councils, through their consultants Garden City Developments (GCDs), are negotiating an in-principle agreement with the developers/landowner(s) for delivery of Garden Community(ies) that create(s) potentially favourable conditions to fund infrastructure related to development receipt. As such, it can be assumed that satisfactory mechanisms can be put into place to capture increase in land value to meet infrastructure costs and manage and maintain assets in the long term for all options should they be preferred. It should also be noted that the information utilised for the assessment of options regarding developability / deliverability in this SA is considered consistent to all options in terms of level of detail; however it should be acknowledged that work is continuously being undertaken in this regard and that updates to this SA may be necessary at the Pre-Submission stage. Impacts regarding commercial viability of the options can be broadly said to be progressively more positive from east to west associated with property values, however such factors have not been considered in detail within this part of the SA for comparison purposes and to ensure more focused differentiation regarding developability considerations.

Regarding GCEC1, the AECOM Report states that all land in this option was put forward for development through the call-for-sites process and that the majority of land is actively being promoted by a single promoter who has an option to develop the land. The AECOM Report adds that it should be possible to commence development in the emerging plan period to 2032, with on and off-site infrastructure solutions identifiable and likely deliverable. Adequate lead-in time is considered to exist for the required planning, funding and delivery of major infrastructure works needed to accommodate the continued development and growth of the Garden Community beyond 2032. For the reasons that on and off-site infrastructure solutions are identifiable and likely deliverable, this option has a strong possibility of meeting all criteria at this stage. Options GCEC2 and GCEC3 are assessed as having more uncertainty

Sustainability Objective	East Colchester		North Colche	ester	West of Colchester / Marks r Tey					f ee	
	GCE C1			GCN C1	GCN C2	GCW C1	GCW C2	GCW C3	GCW C4	GCW B1	GCW B2

regarding delivery in the plan period, due to increasing levels of fragmented land ownership associated with larger indicative scales of development; however the principle of these options being able to meet the aspirations of the sustainability objective and related Garden City Principles is not in question.

Option GCNC1 will have a reasonable prospect of partially meeting the aspiration of the sustainability objective and relevant Garden City Principles. The AECOM Report states that all land in this Option was put forward for development through the Call-for-Sites process, with the majority actively being promoted by a single developer with an option agreement with the landowners to develop. With both road access and utility infrastructure solutions in principle available, it should be possible to commence development within the next 6-10 years. However, the extent of development, especially beyond the plan period, will be dependent on the provision of significant new infrastructure, not least ensuring adequate bridge crossings of the A12 and the future of the Solar Farm which has planning permission for 20 years (extending beyond the plan period). The additional land put forward under option GCNC2 was not included in the Colchester Borough Council Local Plan call-for-sites process, but it is understood that the majority is potentially capable of being brought forward and developed by the same promoter as the land under Option GCNC1. This however would not be all the land under GCNC2, and additional land searches etc. would be required to bring forward GCNC2 in its entirety. There would however be less potential for negative deliverability connotations surrounding the future of the Solar Farm under this option, associated with the larger scale and extent of land.

Regarding option GCWC1, the AECOM Report highlights that with the exception of the triangular shaped land located to the north of the A120 and west of Great Tey Road, all land under this option was included within the local plan call-for-sites process and is actively being promoted for development by two main parties. One of these parties is also understood to be able to bring forward the triangular land north of the A120 and west of Great Tey Road if this was identified for the Garden Community. It is believed that development could be commenced within the next 6-10 years, and make use of existing infrastructure to allow development to commence. The AECOM Report adds that despite this, the extent of development will be heavily constrained (no more than 500-900 homes) without significant investment in the strategic road network (A120/A12). The deliverability of this site is therefore directly linked to investment decisions and the development programme of Highways England. Although the potential exists for option GCWC1 to fully meet the aspirations of the sustainability objective, a 'reasonable prospect' has been highlighted for the purposes of comparison between sites. The same conclusions can be drawn for options GCWC2 and GCWC3, although all land under these options was included within the local plan call-for-sites process. Option GCWC4 will also have similar impacts, with all land included within the Local Plan call-for-sites process with the exception of that located to the north of the A120 and west of Great Tey Road. The constraints are also similar, however with the inclusion of possible train station relocation more centrally to the site and the subsequent addition of considerations to the investment decisions of Network Rail.

Options GCWB1 and GCWB2 have been highlighted in the AECOM Report as having two-fold considerations that could affect delivery. These are the considerations regarding the mineral quarry, which are not considered insurmountable, and constraints regarding the needs to invest in utility infrastructure; which consistent with the site's rural location is currently very limited in terms of physical networks and capacity. Option GCWB2 has additionally been highlighted as potentially allowing more flexibility regarding options for providing access

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Sustainability Objective				North Colche	ster	West of Tey	f Colche	arks	West of Braintree			
	GCE C1	GCE C2	GCE C3	GCN C1	GCN C2	GCW C1	GCW C2	GCW C3	GCW C4	GCW B1	GCW B2	
from the A120/B1256 into the Garden Community, and commencing d	developme	nt of the ne	w settleme	ent relative	to the oper	ation and i	and impact of the proposed quarry.					

6.8.8 Temporal Effects of the Garden Community Options

It can be considered that, in response to the exploration of Garden Communities to meet residual unmet housing needs within the HMA in the latter stages of the three authorities' Local Plan periods, there are no temporal effects that can be identified at this stage.

6.8.9 Secondary Effects of the Garden Community Options

The negative impacts highlighted for options GCNC1 and GCNC2 in relation to those sustainability objectives associated with physical limitations (SO1) and amenity (SO3) are largely secondary or indirect impacts. These have been highlighted due to the wider impact of the Solar Farm on other sustainability objectives and the ability of the options to thus adhere to other Garden City Principles associated with a reduction in land available for development. Should the Solar Farm be removed from the site once the Solar Farm's planning permission has expired, aspirations of sustainability regarding renewable energy generation can be considered to be affected negatively.

6.8.10 Cumulative Effects of Garden Community Option Permutations

Garden	Sustai	nability (Objectiv	es (SO)						
Community Option	1	2	3	4	5	6	7	8	9	10
GCEC1	+/?	+/?	++	+	++	++	++	++	++	++
GCEC2	+/?	+/?	++	+	++	++	++	++	++	+
GCEC3	+/?	+/?	+	+/?	++	++	++	++	++	+
GCNC1	-	-	-	+/?	+	++	++	++	++	+/?
GCNC2	-	-	-	+/?	+	++	++	++	++	+/?
GCWC1	+/?	+/?	+/?	+	+	++	++	++	++	+/?
GCWC2	+/?	+/?	+/?	+	+	++	++	++	++	+/?
GCWC3	+/?	+	+/?	+	+	++	++	++	++	+/?
GCWC4	+/?	-	++	+/?	+/?	++	++	++	++	+/?
GCWB1	+	+/?	++	+/?	+/?	++	++	++	++	+
GCWB2	+	+/?	+	+/?	+/?	++	++	++	++	+

It can be assumed that cumulative impacts could be realised on a small number of the Garden Community options through their geographic dispersal and scale. For instance, options that are grouped around the Colchester town area could give rise to cumulative negative impacts on accessibility, particularly a scenario where the larger East Colchester option (GCEC3) is

progressed alongside either, but especially the larger, North Colchester option (GCNC2). These impacts can be expected to occur on the A12 and A120, particularly through disruption whilst any required upgrades to the strategic road network in north and east Colchester are being undertaken. There are also likely to be air quality impacts resulting from the selection of these options associated with the A12 and A120. It can also be expected that the selection of these two options would have negative impacts on landscapes and soil quality associated with the concentration of strategic development in north east Colchester.

Regarding other options, it can be said that the geographic dispersal is such that no two other options would give rise to significant cumulative impacts that can not be mitigated at the strategic level, other than those associated with population increases more generally and in particular any resultant significant effects indicated as likely in a forthcoming Habitats Regulations Assessment or Appropriate Assessment.

Although all impacts on the delivery of housing, employment and mixed-use development can be seen as significantly positive through the assessment of individual options, the cumulative impacts of focusing all required Garden Communities in the area of Colchester town (i.e. East Colchester, West Colchester and North Colchester options) can conversely be seen as negative across the HMA; there is a desire and requirement for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing housing needs across the whole area and on a district level commensurate to the requirements of LPAs iterated in the NPPF.

6.8.11 Proposed Mitigation Measures / Recommendations of the Garden Community Options

At this stage of the plan-making process it can be considered that there is not sufficient information available for any of the options to make detailed recommendations or suggest mitigation measures for individual options. A general comment could be made however regarding the coverage or compatibility of the options against the sustainability objectives. As can be seen, the options will have to be carefully developed, through effective masterplanning, in order to positively adhere to issues surrounding physical limitations, in particular access arrangements to sites including strategies regarding permeability and interconnectivity within the new settlements.

In addition, it can be seen that the majority of the Garden Community options will have considerations regarding a number of impacts associated with agricultural land, landscape, sites of nature conservation and the historic environment / heritage assets. It should again be acknowledged that such issues are not insurmountable at the scales of development proposed in the options and that effective masterplanning can even seek to enhance conditions. This is also true for issues surrounding existing residential amenity and coalescence, and the masterplanning process will have to seek to eradicate any negative impacts in this regard.

6.9 Policy SP7 – Development and Delivery of New Garden Communities in Essex

6.9.1 Context / Justification

A key element of the spatial strategy for North Essex is the development of three new large-scale garden communities, the locations of which, could straddle council administrative boundaries. Garden communities were amongst a range of options which were considered by the local authorities to meet their needs, but due to the scale of development being proposed across North Essex and the infrastructure constraints which exist in many of the existing main settlements, this was considered the most deliverable and sustainable option, providing a major long-term supply of new homes.

These new communities will accommodate a substantial amount of the housing and employment growth planned for North Essex within the plan period and beyond in a sustainable way that meets the strategic objectives.

The North Essex Garden Communities will be holistically planned new settlements that respond directly to their regional, local and individual site context and opportunities to create developments underpinned by a series of interrelated principles which are based on the Town and Country Planning Association (TCPA) Garden City Principles, adapted for the specific North Essex context.

A number of sites of sufficient scale to accommodate a garden community were identified through the Call for Sites, the Strategic Housing Land Availability Assessment (SHLAA) and wider evidence gathering processes by each of the local authorities. These were evaluated using agreed sustainability criteria and have been subject to further assessment through this SA

As these three proposed garden communities could be cross-boundary, continued close joint working between the authorities involved will be required to secure their successful delivery. Each of the authorities is committed to ensuring that the new communities proposed are as sustainable and high quality as possible and that the infrastructure needed to support them is delivered at the right time. This will require the local authorities to work very closely with the landowners within the proposed garden community locations to develop and put in place a robust delivery mechanism that will ensure a fair and equitable distribution of the costs and land requirements needed to secure the ambitions for these garden communities and create a long term legacy appropriate to the scale of this ambition. The Garden City principles developed by the Town and Country Planning Association have provided a good starting point in creating a framework for this approach. Whilst Uttlesford are in a separate housing market area and are therefore not part of this Strategic part of the Local Plans, there will continue to be ongoing discussions regarding the area of search in this location. The Uttlesford Issues and Options Plan published in October 2015 included an area of search to the west of Braintree. It should also be noted that the Uttlesford Local Plan SA has adopted a compatible and aligned assessment framework in accordance with the methodology used in this SA.

The policy is as follows:

POLICY SP7 – DEVELOPMENT AND DELIVERY OF NEW GARDEN COMMUNITIES IN ESSEX

The following three new garden communities are proposed in North Essex.

- East of Colchester, on the border of Colchester BC and Tendring DC, a new garden community will deliver up to 2,500 homes within the Plan period (as part of an overall total of between 7,000-9,000 homes)
- West of Colchester, on the border of Colchester BC and Braintree DC, a new garden community will deliver up to 2,500 within the Plan period (as part of an overall total of between 15,000 – 20,000 homes)
- West of Braintree in Braintree DC and potentially on the border with Uttlesford DC, a new garden community will deliver up to 2,500 homes within the Plan period (as part of an overall total of between 10,000-13,000 homes)

Each of these will be an holistically and comprehensively planned new community with a distinct identity that responds directly to its context and is of sufficient scale to incorporate a range of homes, employment, green space and other uses to enable residents to meet the majority of their day-to-day needs, reducing the need for outward commuting. Delivery of each new community will be underpinned by a comprehensive package of infrastructure. Unallocated proposals in the borough and districts will not be permitted if it would prejudice the development of these garden communities, regardless of the eventual capacity and phasing of the developments or the status of the 5 year supply in each local authority.

The design, development and delivery of each new garden community will conform with the following principles.

- Community and stakeholder empowerment in the design and delivery of each garden community from the outset and a long-term community engagement and activation strategy
- ii. The public sector working pro-actively and collaboratively with the private sector to design, and bring forward these garden communities, deploying new models of delivery, sharing risk and reward and ensuring that the cost of achieving the following is borne by those promoting the developments: (i) securing a high-quality of place-making, (ii) ensuring the timely delivery of both on-site and off-site infrastructure required to address the impact of these new communities, and (iii) providing a mechanism for future stewardship, management, maintenance and renewal of community infrastructure and assets
- iii. Promotion and execution of the highest quality of planning, design and management of the built and public realm so that the Garden Communities are characterised as distinctive places that capitalise on local assets and establish environments that promote health, happiness and well-being. This will involve having detailed masterplans and design guidance in place to inform and guide development proposals and planning applications. Planning applications for the garden communities will be expected to be consistent with approved masterplans and design guidance
- iv. Sequencing of development and infrastructure provision (both on-site and off-site) to ensure that the latter is provided in tandem with or ahead of the development it supports to address the impacts of the new garden communities and meet the

needs of residents.

- v. Development that provides for a truly balanced and inclusive community and meets the housing needs of local people including a mix of dwelling sizes, tenures and types including provision for self- and custom-built homes to meet the requirements of those most in need including an appropriate level of affordable housing
- vi. Provide opportunities for employment within each new community and within sustainable commuting distance of it
- vii. Plan the new communities around a step change in integrated and sustainable transport systems for the North Essex area that put walking, cycling and rapid public transit systems at the heart of growth in the area, encouraging and incentivising more sustainable active travel patterns
- viii. Structure the new communities to create sociable, vibrant and walkable neighbourhoods with equality of access for all to a range of community services and facilities including health, education, shopping, culture, community meeting spaces, multi-functional open space, sports and leisure facilities
- ix. Specific garden community parking approach and standards will be developed that help promote the use of sustainable transport and make efficient use of land.
- x. Create distinctive environments which relate to the surrounding environment and that celebrate natural environments and systems, utilise a multi-functional greengrid to create significant networks of new green infrastructure including new country parks at each garden community, provide a high degree of connectivity to existing corridors and networks and enhance biodiversity
- xi. Secure a smart and sustainable approach that fosters climate resilience and a 21st century environment in the design and construction of each garden community to secure net gains in local biodiversity, highest standards of innovation in technology to reduce impact of climate change, water efficiency (with the aim of being water neutral in areas of serious water stress), and sustainable waste and mineral management
- xii. Put in place appropriate and sustainable long-term governance and stewardship arrangements for the new communities as well as long-term community engagement

Table 16: Impact on Sustainability Objectives: Policy SP7

Temporal Impacts	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Short	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Medium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Long	++	++	++	++	++	++	++	++	+/?	+	++	+	+	+	0

6.9.2 Significant and Temporal Effects

It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period. There will however be significant long term positive impacts associated with the majority of the Sustainability Objectives through the policy requirements and principles.

Areas that do not have significant impacts include renewable energy generation (SO10) and surface water flooding (SO12) where reference is not directly explicit in the policy. In addition, minor impacts will be expected for sustainability objectives related to air quality and landscapes, although it should be acknowledged that significantly positive impacts are not possible associated with new Greenfield development. There will also be no impacts on soil and mineral deposits through the general principles of the Garden Communities.

There will be an uncertain impact on the historic environment and heritage assets through the policy principles and guidelines. There is scope for the policy to include such detail in order to ensure enhancement of heritage assets or proposals to enhance the enjoyment of the historic environment in the Garden Community areas. Heritage assets exist across all of the Garden Community areas; additionally the sites could potentially contain archaeological remains that would need to be excavated. In consideration of this, the policy could include a principle that Masterplans seek ways to achieve quality and active management of heritage assets and the historic environment as part of a positive strategy for their conservation and enjoyment.

6.9.3 Secondary Effects

The emergence of Garden Communities within the three authorities' area can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. Garden Communities, in line with and in conformity to the general principles set out in the Policy, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

6.9.4 Alternatives Considered

The requirements are specific to the content of the Common Strategic Part 1 for Local Plans and no other alternatives can be considered reasonable. It can be considered that alternatives could only regard different permutations of alternatives explored, in particular those Spatial Strategies and Garden Communities explored within this SA and considered in the plan-making process: the permutations of which are too numerable to be considered in any detail.

6.9.5 Proposed Mitigation Measures / Recommendations

Heritage assets exist across all of the Garden Community areas; additionally the sites could potentially contain archaeological remains that would need to be excavated. In consideration of this, the policy could include a principle that Masterplans seek ways to achieve quality and active management of heritage assets and the historic environment as part of a positive strategy for their conservation and enjoyment.

6.10 Policy SP8 – East Colchester / West Tendring New Garden Community

6.10.1 Context / Justification

The preferred scale and range of land uses for the East Colchester / West Tendring new Garden Community are set out in the following policy in addition to specific principles and requirements that have been identified as needing incorporation into a forthcoming Masterplan.

The SA of this Policy serves to explore whether the range of requirements are suitable to address sustainability concerns and aspirations in line with the Sustainability Objectives and Garden City Principles.

The policy is as follows:

POLICY SP8 - EAST COLCHESTER / WEST TENDRING NEW GARDEN COMMUNITY

The broad area of search shown on the adopted policies map, is identified as a strategic area for development of a new garden community of which the details and final number of homes will be set out in a Masterplan Framework to be prepared jointly between Colchester BC and Tendring DC and which will incorporate the following;

- i. Housing for around 2,500 dwellings within the Plan period (as part of an overall total of between 7,000-9,000 homes)
- ii. Land for employment generating development
- iii. Neighbourhood centres incorporating provision for convenience shopping, community, health and cultural provision
- iv. Primary schools, a secondary school and other community facilities as appropriate
- v. A high proportion of the garden community will comprise green infrastructure including a new country park around Salary Brook

The Masterplan Framework will set out the nature, form and boundary of the new community. The masterplan will be produced in partnership with the development interests and will provide a layout showing the disposition and quantity of future land-uses, and give a three dimensional indication of the urban design parameters which will be incorporated into any future planning applications; together with a phasing and implementation strategy which sets out how the rate of development will be linked to the provision of the necessary social and physical infrastructure to ensure that the respective phases of the development do not come forward until the necessary infrastructure has been secured. The masterplan will incorporate mechanisms for regular review and updating over the course of the implementation of this garden community.

The Masterplan Framework will address the following principles and requirements in the design, development and delivery of the new garden community:

A. Place-making and design quality

1. The development of a new garden community to high standards of design and layout drawing on its context and the considerable assets within its boundaries such as woodland, streams and changes in topography, as well as the

opportunities afforded by the proximity of the University of Essex campus to create a new garden village that is innovative, contemporary and technologically enabled, set within a strong green framework with new neighbourhood centres at its heart. It will be designed and developed to have its own identity as a garden village and be as self-sustaining as possible recognising its location close to the edge of Colchester. It will secure appropriate integration with Colchester and the nearby University of Essex campus by the provision of suitable walking and cycling links and rapid public transport facilities to enable residents of the new community to have convenient access to town centre services and facilities in Colchester as well as Elmstead Market. A separation will be maintained between the new garden community and the nearby villages of Elmstead Market and Wivenhoe.

2. Detailed masterplans and design guidance will be put in place to inform and guide development proposals and planning applications. Planning applications for this garden community will be expected to be consistent with approved masterplans and design guidance.

B. Housing

- 3. A mix of housing types and tenures including self- and custom-build will be provided on the site, including a minimum of 30% affordable housing. The affordable housing will be phased through the development;
- 4. New residential development will seek to achieve an average net density of at least 30 dwellings to the hectare. Higher densities will be located close to the neighbourhood centres and along the strategic pubic transport corridors;

C. Employment

- 5. Provision for B1 and/or non B class employment generating uses towards the south of the site in proximity to the existing University of Essex and Knowledge Gateway, to provide for a wide range of local employment opportunities where appropriate;
- 6. Provision for B1, B2 and B8 businesses to the north of the site close to the A120;

D. Transportation

- 7. A package of measures will be introduced to encourage smarter transport choices to meet the needs of the new community and maximise the opportunities for sustainable travel including the provision of a network of footpaths, cycleways and bridleways to enhance permeability within the site and to access and to access the adjoining area; development of a public rapid transit system; and effective measures to mitigate the transport impacts of the proposed development on the strategic and local road network. Longer term transport interventions will need to be carefully designed to minimise the impacts on the strategic road network and fully mitigate any environmental or traffic impacts.
- 8. Foot and cycle ways shall be provided throughout the development linking the site to the University of Essex, Hythe station and Colchester Town Centre;
- 9. Primary vehicular access to the site will be provided off the A120 and A133.
- 10. Improvements to the local road infrastructure will be necessary to mitigate adverse traffic impacts and serve the new development. These shall include bus

- (or other public transit provisions) priority measures between the site, University of Essex, Hythe station and Colchester Town Centre;
- 11. Other specific infrastructure requirements identified as work on the area of search progresses.

E. Community Infrastructure

- 12. Neighbourhood centres of an appropriate scale will be provided to serve the proposed development. The centres will be located where they will be easily accessible by walking, cycling and public transit to the majority of residents in the garden community.
- 13. A health facility and community meeting places will be provided within the local centres.
- 14. A secondary school, primary schools and early-years facilities will be provided to serve the new development;
- 15. A network of green infrastructure will be provided within the garden community including a community park facility, allotments, a new country park of a minimum of 70 hectares in size provided along the Salary Brook corridor and incorporating Churn Wood, the provision of sports areas with associated facilities and play facilities;
- 16. Provision of or contribution to indoor leisure facilities

F. Other Requirements

- 17. Provision of improvements to waste water treatment including an upgrade to the Colchester Waste Water Treatment Plant and off-site drainage improvements;
- 18. Provision, management and on-going maintenance of sustainable surface water drainage measures to control the risk of flooding on site and which will reduce the risk of flooding to areas downstream or upstream of the development;
- 19. Landscape buffers between the site and existing development in Colchester, Wivenhoe and Elmstead Market;
- 20. Protection and/or enhancement of heritage and biodiversity assets within and surrounding the site;
- 21. Provision of appropriate buffers along strategic road and rail infrastructure to protect new development
- 22. Provision of appropriate design and infrastructure that incorporates the highest standards of innovation in technology to reduce impact of climate change, water efficiency (with the aim of being water neutral in areas of serious water stress), and sustainable waste / recycling management facilities.
- 23. Measures to assist the development of a new community including provision of community development workers
- 24. Appropriate and sustainable long term governance and stewardship arrangements for the new garden community including provision for management and maintenance of the public realm and community assets.

City principles in terms of compatibility. In addition, the appraisal of the this option explored as part of Policy SP6 has also been considered in order to determine whether the principles are appropriate in light of that initial appraisal and any sustainability issues identified. It should be noted however that some constraint-based criteria need not be the focus of the principles of the development in the absence of any identified issues and in addition general themes are ensured through the content of Policy SP7. In those instances, 'N/A' has been highlighted.

Table 17: Impact on Sustainability Objectives: Policy SP8

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
Physical Limitations	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	N/A
	- Incorporation of SUDS.	++
2. Impacts	- Reflect a fusion of the best of the past while embracing new materials and the needs of modern living	N/A
	- Acceptable impacts only on sites of nature conservation interest.	++
	- A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces.	++
	- Acceptable impacts only on high quality agricultural land, important landscape features.	+
3. Environment / Amenity	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	++
4. Transport	- New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision.	++
	- Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city.	++
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	++
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	N/A
5. Resilience	- Positive contribution towards town centres.	++
	- Positive contribution towards identified regeneration priority areas and institutions	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
6. Housing	- Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs.	++
	- An appropriate number homes in a new Garden City must be 'affordable' for ordinary people.	++
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	++
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	+/?
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	+
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	+
	- Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials.	N/A
	- New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.	++
7. Employment Opportunities	- New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household.	++
	- There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	++
8. Mixed-use Opportunities	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	++
9. Environmental Quality &	- Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities.	++
Sustainability	- Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food.	++
	- Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind.	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
	- Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation.	++
	- Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions.	+
	- In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	++
10. Developability / Deliverability	- Capture rising land values created by the development of the town can repay infrastructure costs	++
	- Be commercially attractive with strong market conditions and value potential	++
	- Availability of land being put forward for development with active landowner/developer interest	++
	- Scope for delivery structures through active and positive public and private sector engagement	++

6.10.2 Significant and Temporal Effects

There will be significant positive impacts associated with the majority of the Garden City principles, in consideration of the policy and the appraisal of relevant options within the assessment of Policy SP6. It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period. This includes the impact on the regeneration areas within Colchester town centre and to the east of the town, due largely to the Policy content; in particular those related to sustainable transport, in conjunction with the general location of the option.

An example where the policy will not ensure significant positive impacts against the Garden City Principles however relates to the aspiration that an appropriate percentage of homes that are classified as 'affordable' be for social rent. In addition, the policy is not explicit in a need to consider life-time homes, however does include requirements for a mix of housing types and tenures. A minor positive impact has also been highlighted due to there being no requirement for Gypsy and Traveller provision; however it should be acknowledged that provision would only be required to meet local needs.

Another area where the Policy is only highlighted as having a minor positive impact is regarding zero carbon and energy positive technology. It is considered that such a principle would require further discussion with relevant service providers and is not a principle that can be established at this early stage in the plan-making process. It is also considered that should the Garden Community not include renewable energy technologies, the benefits of the development would outweigh adherence to this aspiration. There will also only be minor positive impacts on agricultural land and landscapes due to the loss of agricultural land associated with greenfield development.

The commercial viability of the options can be broadly said to be progressively more positive from east to west associated with property values. Despite this, for the purposes of this appraisal, all options have been deemed as commercially attractive in line with their inclusion as reasonable options that are viable, deliverable and achievable.

6.10.3 Secondary Effects

The emergence of this Garden Community can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. The Garden Community, in line with and in conformity to the general principles set out in the Policy and Policy SP7, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

6.10.4 Alternatives Considered

The principles and requirements of this Policy are specific to the Garden Community to which this policy relates, ensuring that aspirations surrounding sustainable development will be met from any successful proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such no other alternatives can be considered reasonable.

6.10.5 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

6.11 Policy SP9 - West of Colchester/East of Braintree New Garden Community

6.11.1 Context / Justification

The preferred scale and range of land uses for the West of Colchester/East of Braintree New Garden Community are set out in the following policy in addition to specific principles and requirements that have been identified as needing incorporation into a forthcoming Masterplan.

The SA of this Policy serves to explore whether the range of requirements are suitable to address sustainability concerns and aspirations in line with the Sustainability Objectives and Garden City Principles.

The policy is as follows:

POLICY SP9 - WEST OF COLCHESTER / EAST OF BRAINTREE NEW GARDEN COMMUNITY

The broad area of search shown on the adopted policies map, is identified as a strategic area for development of a new garden community of which the details and final number of homes will be set out in a Masterplan Framework to be prepared jointly between Colchester BC and Braintree DC and which will incorporate the following:

- i. Housing for around 2,500 dwellings within the Plan period (as part of an overall total of between 15,000 to 20,000 homes)
- ii. Provision for Gypsy and Traveller and Travelling showpeople,
- iii. Land for B1 and/or employment generating development
- iv. A district centre and neighbourhood centres incorporating provision for convenience shopping, community, health and cultural provision
- v. Primary schools, a secondary school and other community facilities as appropriate
- vi. A high proportion of the garden community will comprise green infrastructure including a new country park

The Masterplan Framework will set out the nature, form and boundary of the new community. The masterplan will be produced in partnership with the development interests and will provide a layout showing the disposition and quantity of future land-uses, and give a three dimensional indication of the urban design parameters which will be incorporated into any future planning applications; together with a phasing and implementation strategy which sets out how the rate of development will be linked to the provision of the necessary social and physical infrastructure to ensure that the respective phases of the development do not come forward until the necessary infrastructure has been secured. The masterplan will incorporate mechanisms for regular review and updating over the course of the implementation of this garden community.

A. Place-making and design quality

1. The development of a new garden community to high standards of design and layout drawing on its context and the assets within its boundaries including streams, land drains and ditches, mature hedgerows and field boundaries, woodland and historic buildings. A mixed use district centre will provide a vibrant heart to this new community supplemented by neighbourhood centres to form foci

for new neighbourhoods. The design of the community will also address the challenges offered by other features in particular the severance created by the A12 and A120 and maximise the opportunities afforded through integration with the existing community of Marks Tey, and the presence of the railway station, all underpinned by a strong green-grid of connected green space that provides great recreational opportunities for residents and connection to the wider countryside. The garden community will be designed and developed to have its own identity and be as self-sustaining as possible. A separation will be maintained between the new garden community and the nearby settlements of Coggeshall, Stanway and Feering.

2. Detailed masterplans and design guidance will be put in place to inform and guide development proposals and planning applications. Planning applications for this garden community will be expected to be consistent with approved masterplans and design guidance.

B. Housing

- 3. A mix of housing types and tenures including self- and custom-build will be provided on the site, including a minimum of 30% affordable housing. The affordable housing will be phased through the development;
- 4. New residential development will seek to achieve an average net density of at least 30 dwellings to the hectare. Higher densities will be located close to the district and neighbourhood centres, the rail station and along the strategic public transport corridors;

C. Employment

5. Provision for B1 and/or non B class employment generating uses around the rail station as part of mixed use urban development to provide for a wide range of local employment opportunities where appropriate;

D. Transportation

- 6. A package of measures will be introduced to encourage smarter transport choices to meet the needs of the new community and maximise the opportunities for sustainable travel including the provision of a network of footpaths, cycleways and bridleways to enhance permeability within the site and to access the adjoining area; development of a rapid transit system connecting this new garden community to the wider Colchester context; development of opportunities to improve accessibility to Marks Tey rail station; and effective measures to mitigate the transport impacts of the proposed development on the strategic and local road network. Longer term transport interventions will need to be carefully designed to minimise the impacts on the strategic road network and fully mitigate any environmental or traffic impacts.
- 7. Primary vehicular access to the site will be provided via a reconfigured A120.
- 8. Improvements to the local road infrastructure will be necessary to mitigate adverse traffic impacts and serve the new development. These shall include bus priority measures between the site, Colchester and Braintree town centres, employment areas and rail stations;

- 9. Foot and cycle ways shall be provided throughout the development and linking the site to the wider network
- 10. Marks Tey rail station is an important asset located in the northern eastern section of the new garden community. Opportunities will be explored to establish how it can be made more accessible to residents of the new community including relocation of the station to a more central location and improvement of walking, cycling and public transport links to the station.
- 11. Other detailed infrastructure requirements may be added as work on the site progresses.

E. Community Infrastructure

- 12. A new district centre and neighbourhood centres of an appropriate scale will be provided to serve the proposed development. The centres will be located where they will be easily accessible by walking, cycling and public transit to the majority of residents in the garden community including residents of the existing Marks Tey village.
- 13. A health facility and community meeting places will be provided within the district and local centres.
- 14. At least one secondary school, primary schools and early-years facilities will be provided to serve the new development;
- 15. A network of green infrastructure will be provided within the garden community including a community park, allotments, a new country park, the provision of sports areas with associated facilities and play facilities;
- 16. Provision of or contribution to indoor leisure facilities

F. Other Requirements

- 17. Provision of improvements to waste water treatment including an upgrade to the Colchester Waste Water Treatment Plant and off-site drainage improvements:
- 18. Provision, management and on-going maintenance of sustainable surface water drainage measures to control the risk of flooding on site and which will reduce the risk of flooding to areas downstream or upstream of the development;
- 19. Landscape buffers between the site and Coggeshall, Feering, Stanway and Easthorpe;
- 20. Protection and/or enhancement of heritage and biodiversity assets within and surrounding the site including Marks Tey Hall, Easthorpe Hall Farm, Easthorpe Hall and the habitats along and adjoining the Domsey Brook and Roman River corridors.
- 21. Provision of appropriate buffers along strategic road and rail infrastructure to protect new development
- 22. Provision of appropriate design and infrastructure that incorporates the highest standards of innovation in technology to reduce impact of climate change, water efficiency (with the aim of being water neutral in areas of serious water stress), and sustainable waste / recycling management facilities.
- 23. Measures to assist the development of a new community including provision of

- community development workers for a minimum of ten years from initial occupation of the first homes.
- 24. Appropriate and sustainable long-term governance and stewardship arrangements for the new garden community including provision for long-term management and maintenance of the public realm and community assets.

Please note that the following appraisal explores the principles of the policy against the Garden City principles in terms of compatibility. In addition, the appraisal of the this option explored as part of Policy SP6 has also been considered in order to determine whether the principles are appropriate in light of that initial appraisal and any sustainability issues identified. It should be noted however that some constraint-based criteria need not be the focus of the principles of the development in the absence of any identified issues and in addition general themes are ensured through the content of Policy SP7. In those instances, 'N/A' has been highlighted.

Table 18: Impact on Sustainability Objectives: Policy SP9

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
Physical Limitations	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	N/A
	- Incorporation of SUDS.	++
2. Impacts	- Reflect a fusion of the best of the past while embracing new materials and the needs of modern living	N/A
	- Acceptable impacts only on sites of nature conservation interest.	+
	- A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces.	++
	- Acceptable impacts only on high quality agricultural land, important landscape features.	+
3. Environment / Amenity	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	++
4. Transport	- New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision.	**
	- Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city.	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	++
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	N/A
5. Resilience	- Positive contribution towards town centres.	++
	- Positive contribution towards identified regeneration priority areas and institutions	+
6. Housing	- Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs.	++
	- An appropriate number homes in a new Garden City must be 'affordable' for ordinary people.	++
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	++
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	+/?
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	+
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	++
	- Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials.	N/A
	- New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.	++
7. Employment Opportunities	- New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household.	++
	- There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	++
8. Mixed-use Opportunities	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	++
9. Environmental Quality &	- Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities.	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
Sustainability	- Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food.	++
	- Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind.	++
	- Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation.	++
	- Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions.	+
	- In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	**
10. Developability / Deliverability	- Capture rising land values created by the development of the town can repay infrastructure costs	++
	- Be commercially attractive with strong market conditions and value potential	++
	- Availability of land being put forward for development with active landowner/developer interest	++
	- Scope for delivery structures through active and positive public and private sector engagement	++

6.11.2 Significant and Temporal Effects

There will be significant positive impacts associated with the majority of the Garden City principles, in consideration of the policy and the appraisal of relevant options within the assessment of Policy SP6. It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period.

Despite requirements ensuring the protection and/or enhancement of biodiversity assets within and surrounding the site including the Domsey Brook and Roman River corridors, there will be only minor impacts associated with impacts on sites of nature conservation interest; this is due to no specific mention of Marks Tey Brickpit SSSI. Any site option explored in Policy SP6 would have some degree of impact on this designation, as indicated by being in the SSSI's Impact Risk Zone (IRZ) which requires consultation with Natural England.

An example where the policy will not ensure significant positive impacts against the Garden City Principles however relates to the aspiration that an appropriate percentage of homes that are classified as 'affordable' be for social rent. In addition, the policy is not explicit in a need to consider

life-time homes, however does include requirements for a mix of housing types and tenures.

Another area where the Policy is only highlighted as having a minor positive impact is regarding zero carbon and energy positive technology. It is considered that such a principle would require further discussion with relevant service providers and is not a principle that can be established at this early stage in the plan-making process. It is also considered that should the Garden Community not include renewable energy technologies, the benefits of the development would outweigh adherence to this aspiration. There will also only be minor positive impacts on agricultural land and landscapes due to the loss of agricultural land associated with greenfield development.

The commercial viability of the options can be broadly said to be progressively more positive from east to west associated with property values. Despite this, for the purposes of this appraisal, all options have been deemed as commercially attractive in line with their inclusion as reasonable options that are viable, deliverable and achievable.

6.11.3 Secondary Effects

The emergence of this Garden Community can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. The Garden Community, in line with and in conformity to the general principles set out in the Policy and Policy SP7, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

6.11.4 Alternatives Considered

The principles and requirements of this Policy are specific to the Garden Community to which this policy relates, ensuring that aspirations surrounding sustainable development will be met from any successful proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such no other alternatives can be considered reasonable.

6.11.5 Proposed Mitigation Measures / Recommendations

Despite SP9 requirements ensuring the protection and/or enhancement of biodiversity assets within and surrounding the site including the Domsey Brook and Roman River corridors, there is no specific mention of Marks Tey Brickpit SSSI. Any site option explored in Policy SP6 would have some degree of impact on this designation, as indicated by being in the SSSI's Impact Risk Zone (IRZ) which requires consultation with Natural England and this should be factored into any Masteplan.

6.12 Policy SP10 – West of Braintree New Garden Community

6.12.1 Context / Justification

The preferred scale and range of land uses for the West of Braintree New Garden Community are set out in the following policy in addition to specific principles and requirements that have been identified as needing incorporation into a forthcoming Masterplan.

The SA of this Policy serves to explore whether the range of requirements are suitable to address sustainability concerns and aspirations in line with the Sustainability Objectives and Garden City Principles.

The policy is as follows:

POLICY SP10 – WEST OF BRAINTREE NEW GARDEN COMMUNITY

The broad area of search, as shown on the adopted policies map, is identified as a strategic area for development of a new garden community of which the details and final number of homes will be set out in a Masterplan Framework to be prepared jointly between Braintree DC and Uttlesford DC if applicable and which will incorporate the following:

- i. Housing for around 2,500 homes within the Plan period (as part of an overall total of between 10,000 13,000 homes)
- ii. Provision for Gypsy and Travellers and Travelling Showpeople
- iii. Appropriate provision of B1 and/or employment generating development,
- iv. Neighbourhood centres incorporating provision for convenience shopping, community, health and cultural provision,
- v. Primary schools, a secondary school and other community facilities as appropriate,
- vi. A high proportion of the garden community will comprise green infrastructure including a new country park to the east of site.

The Masterplan framework setting out the nature, form and boundary of the new community. The masterplan will be produced in partnership with the development interests and will provide a layout showing the disposition and quantity of future land-uses, and give a three dimensional indication of the urban design parameters which will be incorporated into any future planning applications; together with a phasing and implementation strategy which sets out how the rate of development will be linked to the provision of the necessary social and physical infrastructure to ensure that the respective phases of the development do not come forward until the necessary infrastructure has been secured. The masterplan will incorporate mechanisms for regular review and updating over the course of the implementation of this garden community.

A. Place-making and design quality

1. The new garden community will be developed to high standards of design and layout drawing on its context and the assets within its boundaries including Boxted Wood, Golden Grove, Rumley Wood, Pods Brook and the historic airfield. The gently sloping topography to the south of the site also affords opportunities

for long distance views. These key assets will provide a context to build a new green-grid upon to provide an attractive setting for the new community and linking to the wider countryside. The new community will also address the relationship with existing communities close to its boundaries including Great Saling, Stebbing Green and Stebbing. The garden community will be designed and developed to have its own identity and be as self-sustaining as possible. A separation will be maintained between the new garden community and the nearby village of Great Saling.

2. Detailed masterplans and design guidance will be put in place to inform and guide development proposals and planning applications. Planning applications for this garden community will be expected to be consistent with approved masterplans and design guidance.

B. Housing

- 3. A mix of housing types and tenures including self- and custom-build and starter homes will be provided on the site, including a minimum of 30% affordable housing. The affordable housing will be phased through the development;
- 4. New residential development will seek to achieve an average net density of at least 30 dwellings to the hectare. Higher densities will be located close to the neighbourhood centres and along the strategic public transport corridors;

C. Employment

5. Provision for B1, B2 and B8 businesses in the southern part of the community close to the A120 to provide for a wide range of local employment opportunities

D. Transportation

- 6. A package of measures will be introduced to encourage smarter transport choices to meet the needs of the new community and maximise the opportunities for sustainable travel including the provision of a network of footpaths, cycleways and bridleways to enhance permeability within the site and to access the adjoining area; development of an effective public transport system; development of opportunities to improve accessibility to local rail station; and effective measures to mitigate the transport impacts of the proposed development on the strategic and local road network. Longer term transport interventions will need to be carefully designed to minimise the impacts on the strategic road network and fully mitigate any environmental or traffic impacts.
- 7. Primary vehicular access to the site will be provided via the A120 and B1256.
- 8. Improvements to the local road infrastructure will be necessary to mitigate adverse traffic impacts and serve the new development. These shall include bus priority measures between the site, Braintree town centre, rail station and employment areas including the 120 Skyline business park, Witham rail station and London Stansted Airport;
- 9. Foot and cycle ways shall be provided throughout the development, linking the site to Braintree town through the existing Flitch Way linear country park;
- 10. Other specific infrastructure requirements identified as work on the area of search progresses.

E. Community Infrastructure

- 11. Neighbourhood centres of an appropriate scale will be provided to serve the proposed new community. The centres will be located where they will be easily accessible by walking, cycling and public transit to the majority of residents in the garden community.
- 12. A health facility and community meeting places will be provided within the district and local centres.
- 13. A secondary school, primary schools and early-years facilities will be provided to serve the new development;
- 14. A network of green infrastructure will be provided within the garden community including a community park, allotments, a new country park provided at the east side of the community, the provision of sports areas with associated facilities and play facilities;
- 15. Provision of or contribution to indoor leisure facilities

F. Other Requirements

- 16. Provision of improvements to waste water treatment and off-site drainage improvements;
- 17. Provision, management and on-going maintenance of sustainable surface water drainage measures to control the risk of flooding on site and which will reduce the risk of flooding to areas downstream or upstream of the development;
- 18. Landscape buffers between the site and Great Saling, Stebbing, Stebbing Green and Rayne;
- 19. Protection and/or enhancement of heritage and biodiversity assets within and surrounding the site including Great Saling Hall conservation area and areas of deciduous woodland within and adjoining the site.
- 20. Provision of appropriate buffers along strategic road to protect new development
- 21. Provision of appropriate design and infrastructure that incorporates the highest standards of innovation in technology to reduce impact of climate change, water efficiency (with the aim of being water neutral in areas of serious water stress), and sustainable waste / recycling management facilities.
- 22. Measures to assist the development of a new community including provision of community development workers for a minimum of eight years from initial occupation of the first homes.
- 23. Appropriate and sustainable long-term governance and stewardship arrangements for the new garden community including provision for long-term management and maintenance of the public realm and community assets.

Please note that the following appraisal explores the principles of the policy against the Garden City principles in terms of compatibility. In addition, the appraisal of the this option explored as part of Policy SP6 has also been considered in order to determine whether the principles are appropriate in light of that initial appraisal and any sustainability issues identified. It should be noted however that some constraint-based criteria need not be the focus of the principles of the development in the absence of any identified issues and in addition general themes are ensured through the content of Policy SP7. In those instances, 'N/A' has been highlighted.

Table 19: Impact on Sustainability Objectives: Policy SP10

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
Physical Limitations	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	N/A
	- Incorporation of SUDS.	++
2. Impacts	- Reflect a fusion of the best of the past while embracing new materials and the needs of modern living	N/A
	- Acceptable impacts only on sites of nature conservation interest.	++
	- A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces.	++
	- Acceptable impacts only on high quality agricultural land, important landscape features.	+
3. Environment / Amenity	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	**
4. Transport	- New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision.	++
	- Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city.	**
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	++
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	N/A
5. Resilience	- Positive contribution towards town centres.	++
	- Positive contribution towards identified regeneration priority areas and institutions	+
6. Housing	- Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs.	++
	- An appropriate number homes in a new Garden City must be 'affordable' for ordinary people.	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	++
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	+/?
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	+
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	++
	- Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials.	N/A
	- New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.	++
7. Employment Opportunities	- New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household.	++
	- There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	++
8. Mixed-use Opportunities	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	++
9. Environmental Quality &	- Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities.	++
Sustainability	- Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to provide for healthy local food.	++
	- Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind.	++
	- Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habitat creation.	++
	- Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions.	+

Objective	Corresponding Garden City Principle(s) and any additional considerations	Impact
	- In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	++
10. Developability / Deliverability	- Capture rising land values created by the development of the town can repay infrastructure costs	++
	- Be commercially attractive with strong market conditions and value potential	++
	- Availability of land being put forward for development with active landowner/developer interest	++
	- Scope for delivery structures through active and positive public and private sector engagement	++

6.12.2 Significant and Temporal Effects

There will be significant positive impacts associated with the majority of the Garden City principles, in consideration of the policy and the appraisal of relevant options within the assessment of Policy SP6. It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period.

Despite requirements ensuring the protection and/or enhancement of heritage assets within and surrounding the site including Great Saling Hall conservation area and areas of deciduous woodland within and adjoining the site, there will be only minor impacts associated with impacts on the Registered Park and Garden of Saling Grove. Both site options explored in Policy SP6 could be expected to have some degree of impact on this designation, and this would have to be factored into any Masterplan.

An example where the policy will not ensure significant positive impacts against the Garden City Principles however relates to the aspiration that an appropriate percentage of homes that are classified as 'affordable' be for social rent. In addition, the policy is not explicit in a need to consider life-time homes, however does include requirements for a mix of housing types and tenures.

Another area where the Policy is only highlighted as having a minor positive impact is regarding zero carbon and energy positive technology. It is considered that such a principle would require further discussion with relevant service providers and is not a principle that can be established at this early stage in the plan-making process. It is also considered that should the Garden Community not include renewable energy technologies, the benefits of the development would outweigh adherence to this aspiration. There will also only be minor positive impacts on agricultural land and landscapes due to the loss of agricultural land associated with greenfield development.

The commercial viability of the options can be broadly said to be progressively more positive from east to west associated with property values. Despite this, for the purposes of this appraisal, all options have been deemed as commercially attractive in line with their inclusion as reasonable options that are viable, deliverable and achievable.

6.12.3 Secondary Effects

The emergence of this Garden Community can be expected to have further significant secondary effects on the wider area, associated with the necessary infrastructure provision required of development at that scale. The Garden Community, in line with and in conformity to the general principles set out in the Policy and Policy SP7, ensure that the sustainability effects resulting from strategic level growth are maximised for the benefit of new and existing communities.

6.12.4 Alternatives Considered

The principles and requirements of this Policy are specific to the Garden Community to which this policy relates, ensuring that aspirations surrounding sustainable development will be met from any successful proposal. In so far as the Policy ensures sustainable development, it accords directly to the presumption in favour of sustainable development of Policy SP1 and more critically, the NPPF. As such no other alternatives can be considered reasonable.

6.12.5 Proposed Mitigation Measures / Recommendations

Despite SP10 requirements ensuring the protection and/or enhancement of heritage assets within and surrounding the site including Great Saling Hall conservation area and areas of deciduous woodland within and adjoining the site, the policy could additionally mention the sensitivity of the Registered Park and Garden of Saling Grove. Both site options explored in Policy SP6 could be expected to have some degree of impact on this designation, and this would have to be factored into any Masterplan.

7 Cumulative and Synergistic Impacts of the Common Strategic Part 1 for Local Plan's Policies (SP1-SP7)

This section explores the cumulative and synergistic impacts of the Common Strategic Part 1 for Local Plan's policies SP1-SP7. These policies have been grouped for this purpose as they respond to strategic content as opposed to the more site specific content of Policies SP8-SP10. Cumulative impacts are identified per sustainability objective, with each option exploring whether any exist on a thematic basis.

7.1 Sustainability Objective 1: Create safe environments which improve quality of life, community cohesion

Policy	Impact on SO1
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	++
SP6: Spatial Strategy for North Essex	+
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	0

The Common Strategic Part 1 for Local Plans' policy content, including the principle of the preferred Spatial Strategy approach of SP6, can be seen to have positive impacts on this objective where relevant. There will however be no cumulative impacts associated with this objective, where the objective is more closely concerned with on-site design features and development principles or guidelines.

7.2 Sustainability 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

Policy	Impact on SO2
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	++
SP3: Providing for Employment	++
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	N/A
SP6: Spatial Strategy for North Essex	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

There can be expected to be a cumulative strengthening of requirements to ensure decent and inclusive homes through similarly ensuring that objectively assessed housing can be met throughout Local Plan periods within the HMA, particularly in the latter stages and in accordance with each LPA's individual requirements. The preferred strategic Spatial Strategy also conforms to as broad a geographic dispersal as possible across the HMA in light of available land and promoted sites. The Common Strategic Part 1 for Local Plans, in exploring options and solutions for meeting unmet elements of objectively assessed need over the HMA will also ensure significant positive cumulative impacts on this objective in accumulation with the individual Spatial Strategies of each authority's Local Plan, including elements of non-strategic needs, and as per the LPA level requirements of the OAN Report.

7.3 Sustainability Objective 3: To improve the health of the District's residents and mitigate/reduce potential health inequalities

Policy	Impact on SO3
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	++
SP5: Place Shaping Principles	+
SP6: Spatial Strategy for North Essex	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

There will be significantly positive health impacts associated with the cumulative effects of the Common Strategic Part 1 for Local Plans' policies and commitment to delivering Garden Communities. This is largely due to a combination of health related infrastructure provision and also adherence to Garden City Principles regarding walking and cycling infrastructure and the provision of open space and recreational facilities. There will also be cumulative positive impacts in this regard associated with the content of each authority's Local Plan policies and designation of non-strategic open space and recreation.

7.4 Sustainability Objective 4: 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

Policy	Impact on SO4
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	++
SP3: Providing for Employment	++
SP4: Infrastructure and Connectivity	++
SP5: Place Shaping Principles	N/A
SP6: Spatial Strategy for North Essex	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

As per those iterated for Sustainability Objective 2, there can be expected to be a cumulative strengthening of requirements to ensure job creation through similarly ensuring that employment

requirements can be met throughout Local Plan periods within the HMA, particularly in the latter stages and in accordance with each LPA's individual requirements. The preferred strategic Spatial Strategy also conforms to as broad a geographical dispersal as possible across the HMA in light of available land and promoted sites. The Common Strategic Part 1 for Local Plans will also ensure significant positive cumulative impacts on this objective in accumulation with the individual policies and allocations of each authority's Local Plan, including elements of non-strategic needs and content regarding the rural economy.

7.5 Sustainability Objective 5: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

Policy	Impact on SO5
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	0
SP5: Place Shaping Principles	+
SP6: Spatial Strategy for North Essex	+/?
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	+/?

Although the Common Strategic Part 1 for Local Plans can be seen to have negative connotations on this objective through the development of significant areas of greenfield land, these impacts can be allayed through the potential of Garden Communities to integrate of positive gains in biodiversity and natural resources that create a network of green infrastructure. More specific impacts on international and European designations (Ramsars, SACs, SPAs) will be better understood in the Habitats Regulation Assessments and / or Appropriate Assessments if required of Local Plans, including their requirement to consider in-combination effects. This will enable suitable coverage and compliance with this EU Obligation over the HMA and wider geographical area. It should be noted that the findings of these assessments will need to be adequately factored into any Garden Community masterplanning and Local Plan policies.

7.6 Sustainability Objective 6: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

Policy	Impact on SO6
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	++
SP5: Place Shaping Principles	++
SP6: Spatial Strategy for North Essex	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

The policies of the Common Strategic Part 1 for Local Plans can be expected to have significantly positive cumulative impacts on this objective. The infrastructure requirements of the Garden Communities, in adhering to sustainable transport Garden City Principles can be expected to offer wider benefits and gain for neighbouring areas, and the geographical distribution of the preferred Garden Community options ensure that these benefits can be experienced across all three authorities with an inclusive coverage across the HMA.

7.7 Sustainability Objective 7: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary transport infrastructure to support new development

Policy	Impact on SO7
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	++
SP5: Place Shaping Principles	++
SP6: Spatial Strategy for North Essex	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

As per those iterated for Sustainability Objective 6, the policies of the Common Strategic Part 1 for Local Plans can be expected to have significantly positive cumulative impacts on this objective. The infrastructure requirements of the Garden Communities, in adhering to sustainable transport

Garden City Principles can be expected to offer wider benefits and gain regarding accessibility regarding both transport and services for neighbouring areas, and the geographical distribution of the preferred Garden Community options ensure that these benefits can be experienced across all three authorities with an inclusive coverage across the HMA.

7.8 Sustainability Objective 8: To improve the education and skills of the population

Policy	Impact on SO8
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	+
SP3: Providing for Employment	++
SP4: Infrastructure and Connectivity	++
SP5: Place Shaping Principles	N/A
SP6: Spatial Strategy for North Essex	++
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	++

The policies of the Common Strategic Part 1 for Local Plans can be expected to have significantly positive cumulative impacts on this objective. The education provision requirements of the Garden Communities can be expected to offer wider benefits and gain for neighbouring areas, and the geographical distribution of the preferred Garden Community options ensure that these benefits can be experienced across all three authorities with an inclusive coverage across the HMA.

7.9 Sustainability Objective 9: To conserve and enhance historic and cultural heritage and assets and townscape character?

Policy	Impact on SO9
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	+
SP6: Spatial Strategy for North Essex	+
SP7: Development and Delivery of New Garden Communities in Essex	+/?
Cumulative Impact	+/?

Although more relevant to the selection of specific Garden Community sub-options, there could be a negative cumulative impact on the historic environment associated with strategic development at the scale proposed, particularly associated with field boundaries and patterns. Despite this, masterplanning has the potential to enhance site specific assets and their settings and deliver a high quality built environment and so the cumulative impacts are uncertain at this stage.

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

Policy	Impact on SO10
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	+
SP6: Spatial Strategy for North Essex	+
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	0

There will be cumulative positive impacts regarding energy efficiency through the possibilities presented by strategic growth that adheres to Garden City Principles however these will be associated with new housing stock. Garden Communities have the potential to incorporate

renewable energy generation, although it is uncertain whether any proposed schemes will have any wider benefits beyond the scope of each individual Garden Community.

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

Policy	Impact on SO11
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	++
SP6: Spatial Strategy for North Essex	N/A
SP7: Development and Delivery of New Garden Communities in Essex	++
Cumulative Impact	+/?

There is likely to be cumulative negative implications regarding water scarcity and sewerage emanating from the preferred options of the Common Strategic Part 1 for Local Plans however the implications of this are best resolved on a site-by-site basis through early discussions with service providers and will largely reflect the scale of any Garden Community sub-options selected. In addition it should be noted that all growth in the wider area can be expected to have such impacts and as such uncertain cumulative impacts have been identified. Water quality can not be expected to experience any cumulative negative impacts through the development of high quality new development as required by Garden City Principles.

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

Policy	Impact on SO12
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	+/?
SP6: Spatial Strategy for North Essex	N/A
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	0

There are no identified flood risk concerns resulting from the preferred policies and Garden Communities of the Common Strategic Part 1 for Local Plans. Flood risk issues are considered more relevant to site specific considerations regarding alleviation and it should be noted that the scale of the Garden Communities enables the integration of sustainable drainage techniques.

7.13 Sustainability Objective 13: To improve air quality

Policy	Impact on SO13
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	+
SP6: Spatial Strategy for North Essex	+
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	+/?

There are no identified cumulative implications of the specific content of the policies and preferred Garden Community options contained in the Common Strategic Part for Local Plans; the preferred Garden Community options correspond to the best possible dispersal across the HMA to alleviate air quality issues in Colchester and associated with the A12 and A120. There are likely to be

general negative connotations on air quality however associated with the level of growth required in the HMA and as such uncertain cumulative impacts are highlighted.

7.14 Sustainability Objective 14: To conserve and enhance the quality of landscapes

Policy	Impact on SO14
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	0
SP6: Spatial Strategy for North Essex	+/?
SP7: Development and Delivery of New Garden Communities in Essex	+
Cumulative Impact	-

Although more relevant to the selection of specific Garden Community sub-options, there can be expected to be a negative cumulative impact on landscapes associated with strategic development on greenfield land at the scale proposed; it should be noted however that this is a general issue relevant to any new development of greenfield land. It should also be noted that masterplanning has the potential to mitigate and minimise site specific issues and delivery a high quality built environment.

7.15 Sustainability Objective 15: To safeguard and enhance the quality of soil and mineral deposits?

Policy	Impact on SO15
SP1: Presumption in Favour of Sustainable Development	+
SP2: Meeting Housing Needs	N/A
SP3: Providing for Employment	N/A
SP4: Infrastructure and Connectivity	N/A
SP5: Place Shaping Principles	N/A
SP6: Spatial Strategy for North Essex	N/A
SP7: Development and Delivery of New Garden Communities in Essex	0
Cumulative Impact	0

There will be no cumulative impacts on safeguarding mineral deposits and the quality of soil associated with the selection of the preferred Garden Community options and the policy content of the Common Strategic Part 1 for Local Plans.

8 Cumulative and Synergistic Impacts of the Common Strategic Part 1 for Local Plan's Policies (SP8-SP10)

This section explores the cumulative and synergistic impacts of the Common Strategic Part 1 for Local Plan's policies SP8-SP10. There have been explored separately from Policies SP1-SP6 in so far as they have been assessed using a different framework and are focused more on how the relevant policies respond to specific principles and site considerations rather than general strategic themes. For the impacts associated from the specific Garden Community options, please refer to the relevant section in the appraisal of Policy SP6.

Objective	Corresponding Garden City Principle(s) and any additional considerations	SP8	SP9	SP10
Physical Limitations	- Absence of insurmountable problems (ground conditions, flood risk, hazardous risks, pollution, contamination and air quality)	N/A	N/A	N/A
	- Incorporation of SUDS.	++	++	++
2. Impacts	- Reflect a fusion of the best of the past while embracing new materials and the needs of modern living	N/A	N/A	N/A
	- Acceptable impacts only on sites of nature conservation interest.	++	+	++
	- A surrounding belt of countryside to prevent sprawl, well connected and biodiversity rich public parks, and a mix of public and private networks of well-managed, high-quality gardens, tree-lined streets and open spaces.	++	++	++
	- Acceptable impacts only on high quality agricultural land, important landscape features.	+	+	+
3. Environment / Amenity	- Acceptable relationship only with and impact on occupiers of existing properties and neighbouring areas / towns (maintaining adequate separation)	++	++	++
4. Transport	- New Garden Cities should be located only where there are existing rapid public transport links to major cities, or where real plans are already in place for its provision.	++	**	++
	- Walking, cycling and public transport should be the most attractive and prioritised forms of transport in the garden city.	++	++	++
	- Ensure a comprehensive and safe network of footpaths and cycleways throughout the development, and public transport nodes within a short walking distance of all homes.	++	++	++
	- Where car travel is necessary, consideration should be made of shared transport approaches such as car clubs.	N/A	N/A	N/A

Objective	Corresponding Garden City Principle(s) and any additional considerations	SP8	SP9	SP10
5. Resilience	- Positive contribution towards town centres.	++	++	++
	- Positive contribution towards identified regeneration priority areas and institutions	++	+	+
6. Housing	- Garden Cities (should be) part of a wider strategic approach to meeting the nation's housing needs.	++	++	++
	- An appropriate number homes in a new Garden City must be 'affordable' for ordinary people.	++	++	++
	- Provide mixed-tenure homes and housing types that are genuinely affordable for everyone	++	++	++
	- An appropriate percentage of the homes that are classified as 'affordable' must be for social rent.	+/?	+/?	+/?
	- Consider life-time homes and the needs of particular social groups, such as the elderly.	+	+	+
	- A range of housing types including self-build / custom build and gypsy and traveller pitches	+	++	++
	- Aspire to the very best domestic and commercial architecture with sensitivity to local vernacular design and materials.	N/A	N/A	N/A
	- New Garden Cities should include opportunities for people to build their own home (either alone or collectively), and set aside land for future community needs.	++	++	++
7. Employment Opportunities	- New Garden Cities must provide a full range of employment opportunities, with the aim of no less than one job per new household.	++	++	++
	- There should be a robust range of employment opportunities in the Garden City itself, with a variety of jobs within easy commuting distance of homes.	**	**	++
8. Mixed-use Opportunities	- Inclusion of cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods	++	++	++
9. Environmental Quality & Sustainability	- Create shared spaces for social interaction and space for both formal and informal artistic activities, as well as sport and leisure activities.	++	**	++
	- Strong emphasis should be placed on homes with gardens and on space for both allotments and community gardens and orchards to	++	++	++

Objective	Corresponding Garden City Principle(s) and any additional considerations	SP8	SP9	SP10
	provide for healthy local food.			
	- Garden Cities are places of cultural diversity and vibrancy with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of elderly in mind.	++	++	‡
	- Net gain to biodiversity is secured through master plans which link generous private and community gardens with wider public green and blue space and ultimately with strategic networks of green infrastructure and habit	‡	‡	‡
	- Garden Cities must demonstrate the highest standards of technological innovation in zero carbon and energy positive technology to reduce the impact of climate emissions.	+	+	+
	- In building standards, a requirement for innovation beyond zero carbon and in the use of materials and construction techniques.	++	++	++
10. Developability / Deliverability	- Capture rising land values created by the development of the town can repay infrastructure costs	++	++	++
	- Be commercially attractive with strong market conditions and value potential	++	++	++
	- Availability of land being put forward for development with active landowner/developer interest	++	++	++
	- Scope for delivery structures through active and positive public and private sector engagement	++	++	++

It can be said that cumulative and synergistic impacts can not be identified of the Garden Community options due to their geographical spread across the HMA. Despite this, the benefits that extend to wider areas beyond the Garden Communities themselves can be seen to strengthen significantly through the three Garden Communities. Largely these impacts regard social and economic benefits, in both rural areas and the town centres of Colchester and Braintree.

In addition, cumulative impacts can be expected to be significant in accumulation with the 'Part 2' of each of the authorities' Local Plans, which will look to build on this long term strategic growth with short and medium term solutions on a non-strategic level.

9 Conclusions and Recommendations

9.1 Key points from the assessment of policies SP1-SP7

The following table sets out the combined long term sustainability impacts assessed in the individual appraisal of each policy as well as that of the Vision and the Strategic Objectives of the Common Strategic Part 1 for Plans.

Policy	Sustainability Objectives (SO)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Vision	N/A	++	++	++	++	++	++	N/A	++	N/A	N/A	N/A	N/A	N/A	N/A
Objs	+	++	++	++	N/A	++	++	++	+	+	N/A	N/A	N/A	N/A	N/A
SP1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SP2	N/A	++	N/A	++	N/A	N/A	N/A	+	N/A						
SP3	N/A	++	N/A	++	N/A	N/A	N/A	++	N/A						
SP4	N/A	N/A	++	++	0	++	++	++	N/A	0	0	N/A	N/A	N/A	N/A
SP5	++	N/A	+	N/A	+	++	++	N/A	+	+	++	+/?	+	0	N/A
SP6	+	++	++	++	+/?	++	++	++	+	+	N/A	N/A	+	+/?	N/A
SP7	++	++	++	++	++	++	++	++	+/?	+	++	+	+	+	0

The following key points can be made regarding the appraisal of the preferred options:

- The strategic vision for the area will have short and medium term positive impacts on housing and employment related Sustainability Objectives (SO2 and SO4 respectively). The significance of these impacts will increase in the long term with the principle of sustainable Garden Communities being developed as part of a sustainable strategy for growth and in response to objectively assessed housing and employment needs, and also their wider benefits. This will also be the case for health (SO3), the natural environment (SO5), and the historic environment (SO9) through the provision of green infrastructure, new and expanded education and health care facilities and recreational land and also the protection and enhancement of countryside and heritage assets. There will additionally be significant long term impacts on ensuring the necessary transport infrastructure to support new development (SO7) in line with the emergence of the Garden Communities in the latter stages of the three authorities' Local Plan periods.
- There will be positive impacts associated with housing need (SO2) targets and also employment growth (SO4), progressing to significant positive impacts in the long term associated with the requirement that Garden Communities be forthcoming to meet residual or unmet need. This is due to the number of new homes being needed to provide sufficient labour to meet the number of forecast jobs, as per the methodology behind the identification of the need in the OAN Report, and the need to provide a range of employment opportunities in association with Garden City Principles.

- Employment forecasts have an underlying principle: that planning for housing, economic
 land uses and community facilities / services should be integrated, so that the demand for
 labour is fulfilled and there is no unsustainable commuting. The principle of these links to
 identifying future job growth to housing provision is a key tenet of sustainability and as
 such, there will be further significant positive impacts associated with employment and
 housing.
- The principles behind the Spatial Strategy will have a large number of significant positive impacts on the Sustainability Objectives, most notably on those that correspond to housing delivery (SO2), economic growth (SO4) and accessibility (SO7). The short and medium term impacts of these are related to the notion that development will be accommodated within or adjoining settlements according to their scale and existing role both within each individual district; these correspond to the NPPF requirements of each LPA in the formulation of a Local Plan and offers a local distinctiveness to the strategic area relevant to local needs and communities.
- Further long term significant positive impacts associated with Garden Communities can be expected to be realised on health (SO3), through the integration and requirement of suitable facilities and open space and recreation requirements; sustainable travel (SO6) through the requirements of sustainable transportation means to be provided, and education and skills (SO8) through the provision of primary, secondary and early years facilities as per Garden City Principles and Essex County Council infrastructure requirements.
- Minor positive impacts can be expected through Garden Community developments
 associated with townscapes (SO9) through a combined alleviation of pressures on existing
 settlements at the expected scale and also in conjunction with design expectations and
 opportunities. This focus away from the expansion of existing settlements will also not
 alleviate air quality pressures in settlements (SO13) and also offer opportunities for
 renewable energy generation (SO10).
- Uncertain impacts can be expected to arise from the principle of Garden Communities
 regarding the natural environment (SO5) and landscapes (SO14) through the development
 of green field land, however it should be acknowledged that at the specified scale, and
 commensurate with the density requirements of Garden City Principles, Garden
 Communities are capable of mitigating such concerns effectively and can even lead to
 opportunities regarding biodiversity gain.
- There will be significant positive impacts associated with those Sustainability Objectives
 related to infrastructure delivery that would specifically be related to strategic level growth
 and stimulated by it across the Strategic Area; these being health (SO3), sustainable
 transport (SO6) and education (SO8).
- Policy SP6 could be more explicit as to the requirements of new development in regards to
 the historic environment and assets (SO9) and also possible biodiversity gain (SO5). The
 Policy could also respond to aspirations to increase renewable energy generation (SO10) in
 strategic scale development opportunities. There is also scope for the policy to include
 principles related to surface water flood risk (SO12) and in particular SuDS; for this reason
 uncertain impacts have been highlighted at present. It should be acknowledged however
 that significant positive impacts can be expected to arise from relevant individual LPA Local
 Plan policies, which can also respond better to requirements for local distinctiveness in that

context.

Heritage assets exist across all of the broad Garden Community areas; additionally the
sites could potentially contain archaeological remains that would need to be excavated. In
consideration of this, Policy SP7 could include a principle that Masterplans seek ways to
achieve quality and active management of heritage assets and the historic environment as
part of a positive strategy for their conservation and enjoyment.

9.2 Key points from the assessment of Garden Community options

The following table sets out the assessed sustainability impacts of all reasonable Garden Community options explored.

Garden	Sustainability Objectives (SO)										
Community Option	1	2	3	4	5	6	7	8	9	10	
GCEC1	+/?	+/?	++	+	++	++	++	++	++	++	
GCEC2	+/?	+/?	++	+	++	++	++	++	++	+	
GCEC3	+/?	+/?	+	+/?	++	++	++	++	++	+	
GCNC1	-	-	-	+/?	+	++	++	++	++	+/?	
GCNC2	-	-	-	+/?	+	++	++	++	++	+/?	
GCWC1	+/?	+/?	+/?	+	+	++	++	++	++	+/?	
GCWC2	+/?	+/?	+/?	+	+	++	++	++	++	+/?	
GCWC3	+/?	+	+/?	+	+	++	++	++	++	+/?	
GCWC4	+/?	-	++	+/?	+/?	++	++	++	++	+/?	
GCWB1	+	+/?	++	+/?	+/?	++	++	++	++	+	
GCWB2	+	+/?	+	+/?	+/?	++	++	++	++	+	

The following key points can be made regarding the appraisal of specific Garden Community options:

9.2.1 East Colchester Options: GCEC1 (Southern land Focus), GCEC2 (A133 to Colchester - Ipswich Rail Line) and GCEC3 (North to South wrap)

- Access will be dependent on the A120 and A133 and requires an access strategy.
 Regarding GCEC2 and GCEC3, the Great Eastern Mainline creates severance, bisecting
 movements to the North West (and south in regard to GCEC3); however there are three
 vehicular bridges in place which could be upgraded. Despite these considerations, the
 scale of the proposal has a reasonable prospect of overcoming them in meeting Garden
 City Principles.
- The valley slopes following Salary Brook can be utilised as green infrastructure.

- Surface water networks are at capacity, the Colchester Water Recycling Centre is near
 capacity (but can be expanded in response to developer demand) and gas and electricity
 network reinforcement would also be needed; however none of these limitations can be
 considered insurmountable of any proposal at the scale of the three options.
- All options contain Grade 1 Agricultural Land along much of the eastern boundary; however the requirements for a belt of countryside to prevent sprawl has scope for its protection.
- The existing natural landscape and ecological features within the options such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches, if protected, conserved and enhanced, have the potential to form key landscape structuring components of the Garden Community and related green infrastructure network.
- GCEC3 contains a SSSI (Bullock Wood) which is likely to require more sensitive
 consideration in regard to preservation and enhancement as part of a belt of countryside to
 prevent coalescence with Colchester.
- Options GCEC1 and GCEC2 will have positive impacts associated with the topography of the area constraining views into and across the sites, which are assessed as reducing the visual impacts of any Garden Community.
- The existing Local nature Reserves of Salary Brook and Welsh Wood create the basis of an
 established and high quality buffer between Colchester and any new Garden Communities
 to the west, and there are no other existing settlements to the east that would be affected
 by any of the options at their stated scales.
- Option GCEC3 has considerations regarding the A137 Harwich Road which bisects the small settlement of Fox Street. Maintaining a clear separation of this settlement may fragment the wider development, in particular that area to the north of the railway line.
- Regarding options GCEC1 and GCEC2, the presence of the Great Eastern Mainline and rail links at Hythe exist as a rapid public transport link to Colchester, ensuring that the principle of ensuring rail links exist; it would be likely however that a new station would be needed. In addition, existing strategic and local bus networks currently set down and pick-up in close proximity to both sites. Option GCEC3 has been assessed as having the same considerations, however due to the spatial size of the site it is likely that a further level of site wide connectivity will be required.
- All Options have all been assessed as making a significantly positive impact on the town
 centre of Colchester, due largely to the options' proximity to the town centre of Colchester,
 the University and identified regeneration areas in east Colchester. Access to the town
 centre railway station, accessible from the Hythe station at present and via other public
 transport means ensures that direct access to the town centre and regeneration areas in
 the east of the town centre has the potential to be maximised in a sustainable manner.
- All of the Garden Community Options can be expected to have significantly positive impacts on housing, employment, mixed-use development opportunities and the incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles.
- It should be possible to commence development in the emerging plan period to 2032, with

on and off-site infrastructure solutions identifiable and likely deliverable. Adequate lead-in time is considered to exist for the required planning, funding and delivery of major infrastructure works needed to accommodate the continued development and growth of the Garden Community beyond 2032. Options GCEC2 and GCEC3 are assessed as having more uncertainty regarding delivery in the plan period, due to increasing levels of fragmented land ownership associated with larger indicative scales of development; however the principle of these options being able to meet the aspirations of the sustainability objective and related Garden City Principles is not in question.

9.2.2 North Colchester Options: GCNC1 (East of Langham Lane Focus) and GCNC2 (Maximum Land Take)

- For both options site access will be reliant on the A12 and significant consideration will need to be given to how any Garden Community would relate to the A12, particularly in developing strategies which form an appropriate interface between the A12 and local roads. There will be a need to restrict unnecessary traffic flows which could increase congestion along this strategically important route.
- The functionality of any forthcoming development will be dependent upon bridging and facilitating sustainable linkages across the A12 connecting with Colchester to the south. GCNC2 could however benefit from an opportunity to access links with Straight Road which may provide greater flexibility in relation to the overall highway and related transport network for the new settlement as well as greater spread of traffic demand.
- Both options for North Colchester have a potentially significant constraint in the form of a 20 hectare Solar Farm within both areas, which exists with a 20 year planning permission. Although this could represent a benefit in regard to renewable energy generation for any new Garden Community, it equally constrains the options in regard to conforming to a number of wider Garden City Principles, particularly those related to high quality design and layouts, and green infrastructure which are not fragmented or limited in the scope of aspirations at the masterplanning stage.
- Anglia Water have identified major constraints in terms of providing infrastructure and/or treatment works to serve proposed growth at this location.
- Options GCNC1 and GCNC2 both include large areas of land identified as Grade 2
 Agricultural Land, classed as 'very good' by Natural England, with GCNC2 having an
 additional proportion of Grade 1 'excellent' Agricultural Land.
- Although ecological assets exist throughout, both sites do not contain any wildlife
 designations, and so have scope to introduce these within proposals in conformity to
 Garden City principles.
- The landscape implications of both sites are considered significant; the eastern boundary of both sites border the Dedham Vale AONB and a development of this size has the potential to significantly impact on the character and setting of the AONB. It should also be considered that any potential extension of the AONB westward may be impacted by development at both these options.
- Both options have the potential to negatively impact on the existing settlements of Langham. In consideration of the location and size of the Solar Farm existing at Boxted Airfield, it is uncertain to what extent option GCNC1 could adequately ensure a degree of separation with Langham whilst simultaneously ensuring that wider Garden City Principles

- are met, where the extent of land available for housing and employment delivery is uncertain at this current time.
- Regarding the southern boundary of both options, it is likewise uncertain how separation
 can be guaranteed with Colchester and the Northern Gateway when considered alongside
 the need for such links to be forged to the benefit of the wider community and particularly
 for access and public transport links. Regarding this, it can be considered that these
 options are unlikely to benefit from a degree of separation from Colchester.
- Options GCNC1 and GCNC2 do not benefit from an existing rail link and in addition, the
 sites are severed by the A12 to the south, proving such integration unlikely to be suitable or
 viable. With this in mind, it can be considered that only bus, walking and cycling
 opportunities appear valid until further information is known regarding these options.
- Should bridging of the A12 be possible, or existing bridges be upgraded, then access to
 wider public transport initiatives would be present to the Northern Gateway. In addition, a
 Park and Ride exists to the west corner of both sites which could be expanded or otherwise
 utilised.
- Links to the A12 and the strategic road network are likely to prove private car use attractive
 and it is uncertain whether there will be any benefits to the town centre through bus links
 only given the proximity and ease of access to out of town centres.
- Options GCNC1 and GCNC2 will have positive impacts associated with distances to the
 town centre, existing vehicular access and also existing access to park and ride services
 into the town centre; however these links, in addition to the presence of the Northern
 Gateway (including proposals for this area), and combined with the emergence of an
 expected district or neighbourhood centre at any Garden Community itself could
 cumulatively reduce the need for residents to access the town centre for services,
 convenience retail and leisure facilities.
- All of the Garden Community Options can be expected to have significantly positive
 impacts on housing, employment, mixed-use development opportunities and the
 incorporation of generous areas of publicly accessible open space, allotments/food
 production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology at
 this stage, and are all indistinguishable in regard to the opportunities of each option to
 adhere to relevant Garden City Principles.
- With both road access and utility infrastructure solutions in principle available, it should be
 possible to commence development within the next 6-10 years. However, the extent of
 development, especially beyond the plan period, will be dependent on the provision of
 significant new infrastructure, not least ensuring adequate bridge crossings of the A12 and
 the future of the Solar Farm which has planning permission for 20 years (beyond the plan
 period).
- The additional land put forward under GCNC2 was not included in the Colchester Borough Council Local Plan call-for-sites process, but it is understood that the majority is potentially capable of being brought forward and developed by the same promoter as the land under GCNC1. This however would not be all the land under GCNC2, and additional land searches etc. would be required to bring forward GCNC2 in its entirety. There would however be less potential for negative deliverability connotations surrounding the future of the Solar Farm under this option, associated with the larger scale and extent of land.

9.2.3 West of Colchester / Marks Tey Options: GCWC1 (North and South of A12 / Rail Corridor Focus), GCWC2 (South of A120 and North of Marks Tey Existing Settlement), GCWC3 (South of A120 Focus) and GCWC4 (Maximum Land Take)

- Road infrastructure and junction access / capacity represent the main barriers to development, however it should be noted that the presence of the A12 and A120 are beneficial to development in this location providing local and regional connectivity. In addition, new highway infrastructure of a planned 3-lane widening of the A12 and the duelling of the A120 from Braintree to the A12 (incorporating a potential bypass of Marks Tey) would make the principle of development in this location viable for further exploration.
- A significant transport infrastructure programme would be needed for all options to
 overcome localised connectivity issues surrounding an east/west severance due to the
 alignment of the A12 and Great Eastern Mainline rail route; however any successful
 proposal can be expected to offer significant wider benefits. This is a general issue
 surrounding all of the West Colchester / Marks Tey options; however they can reasonably
 be expected to increase commensurate to increasing scales.
- There is a possible need to relocate and expand the Marks Tey rail station; however the
 presence of an existing rail station merits this exploration and strategic scale growth at this
 broad location.
- All options have underground and overhead pipeline and cable routes which would likely
 require retention and the development of exclusion zones. These issues, and other
 considerations such as areas of Flood Risk Zone 3 in the broad area, are not considered
 insurmountable at the scale of growth explored for all options.
- All options include land that is identified as Grade 2 Agricultural Land. Of these options, GCWC3 can be seen to offer a smaller proportion of development on Grade 2 ALC,
- Options GCWC1, GCWC2 and GCWC4 contain the Marks Tey Brickpit SSSI, however its location at the north east boundary in each instance ensures that this designation can be protected and enhanced through the requirements of a surrounding belt of countryside to prevent sprawl. Option GCWC3 does not have any implications in this regard, although detailed proposals would have to be sensitive to the presence of Domsey Brook.
- Options GCWC2 and GCWC4 are in close proximity to a Scheduled Monument (a Roman villa 450m south of Warren's Farm to the north) and could affect the setting of this asset, however the specific impacts of the options, and their significance, would have to be subject to specialist assessment once more detailed masterplanning is forthcoming (and should these options be selected). Option GCWC1 does not extend as far north west in proximity to the Scheduled Monument as Options GCWC2 and GCWC4 as to warrant the same expected level of potential impact; however the same issues would have to be investigated. Option GCWC3 is assessed as unlikely to impact on this designation.
- All the options contain a small number of Listed Buildings, in reflection of the size of the
 proposals, and although impacts on their setting would have to be further investigated, it is
 believed that at this strategic level, the scope of all proposals ensures that impacts can be
 avoided.
- The landscape implications of the proposals vary commensurate to the scale of each proposal, with GCWC4 expected to have more significant impacts as GCWC1 and GCWC2, and GCWC3 expected to have minimal impacts in comparison to all the other options. The landscape character of the broad area is not particularly sensitive to change,

- with limited views associated with medium to large field patterns and mature hedgerows.
- All options will have varying different implications associated with settlement coalescence; these are largely commensurate to the different scales of the proposals. It should be noted however that coalescence can be prevented in all options with similarly varying degrees of countryside acting as a buffer.
- Impacts on the residential amenity of the settlements of Marks Tey and Little Tey are not as positive, with options GCWC1, GCWC2 and GCWC4 possibly assimilating the aforementioned settlements into the Garden Community. A buffer separation will likely be needed to be developed through masterplanning to minimise certain impacts on existing communities, and it could be considered that the scope for this would be maximised through the larger option GCWC4 with enough available land to have limited knock on effects regarding adhering to other Garden City Principles. Option GCWC3 has been assessed as not having these specific considerations in addition to its required countryside belt protecting any properties to the south.
- The West Colchester / Marks Tey options all benefit from the presence of the Great Eastern Mainline running through the site, and also the existing rail station of Marks Tey. In addition, the infrastructure commitments regarding the A12 and A120 are likely to prove increased bus links suitable and viable options. Despite this, there is a possibility that these infrastructure improvements would warrant sustainable transport means less attractive in favour of private car journeys.
- Work will be required to adequately ensure the interconnectivity by sustainable means for all options.
- As an existing settlement, Marks Tey / Little Tey is already connected by public transport both bus and rail (Marks Tey rail station) to Colchester, Braintree and other centres,
 including London. This is a clear advantage for developing a sustainable transport system
 for the Garden Community. It also provides the opportunity to connect the site with and
 support some form of inter-urban North Essex public transport system, such as Bus Rapid
 Transit (BRT) or similar.
- Specifically for option GCWC4, the scale of this option and the constrained location of the
 existing Marks Tey rail station limit any meaningful expansion of this facility, and it is
 considered that to provide a fully integrated and accessible sustainable transport system it
 will be necessary to relocate the railway station to a more central location within the Garden
 Community.
- Options GCWC1, GCWC2 and GCWC3 have been assessed as having positive impacts on the town centre of Colchester, and benefit from existing rail links at Marks Tey which can be expected to be expanded in line with any Garden Community option. Impacts are limited however due to the possibility of residents using the facilities of Tollgate in the first instance as preferable and closer to any Garden Community than the town centre of Colchester. Option GCWC4 has been assessed as having uncertain impacts partly for this reason, but also commensurate to its scale; the level of services and facilities required within this Garden Community option itself should reasonably be expected to be of a suitably large scale in order to be sustainable, however may reduce the number of expected journeys into Colchester for services, convenience retail and leisure facilities.
- All of the Garden Community Options can be expected to have significantly positive impacts on housing, employment, mixed-use development opportunities and the

- incorporation of generous areas of publicly accessible open space, allotments/food production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology at this stage, and are all indistinguishable in regard to the opportunities of each option to adhere to relevant Garden City Principles.
- It is believed that development could be commenced within the next 6-10 years, and make
 use of existing infrastructure to allow development to commence. Despite this, the extent of
 development will be heavily constrained (no more than 500-900 homes) without significant
 investment in the strategic road network (A120/A12). The deliverability of this site is
 therefore directly linked to investment decisions and the development programme of
 Highways England.

9.2.4 West of Braintree Options: GCWB1 (Braintree DC Only) and GCWB2 (Braintree DC and Uttlesford DC Land)

- Both options to the West of Braintree are away from the A120 and served from small rural lanes only, providing limited connectivity to the broad area. In addition, one such lane, 'Pods Lane' is a designated Protected Lane which, as additionally a heritage asset, would likely need to be integrated into any new Garden Community.
- Site access would generally be dependent on the A120 and B1256 from the south and limitations surrounding the allocated minerals site. An upgrade of the junction of the B1256 and Blake End would create a new access spur that avoids the quarry and is in principle considered possible. Overall, development of the broad area would require an access strategy that manages the interface between local and strategic traffic and restricts us of the rural lane network. Option GCWB2, in addition to these general considerations, may require additional solutions due to its larger scale of development. Regarding other physical limitations, both sites are considered relatively free of constraint, apart from those hedgerows, field ditches and woodland that can be integrated into any forthcoming masterplan.
- Options GCWB1 and GCWB2 both include land that is identified as Grade 2 Agricultural Land. Both options also include land allocated for minerals development within the adopted Minerals Local Plan (MLP). This land, in the south east portion of both options, is also identified as a flagship restoration scheme as part of MLP Policy S12; as a result, measures already exist to increase biodiversity gain on the site, and there are no perceived incompatibilities of this with the requirement of both GCWB1 and GCWB2 to provide a belt of countryside to prevent urban sprawl.
- Option GCWB2 includes the designation of Boxted Wood, a LoWS and Ancient Woodland whereas GCWB1 extends only up to its eastern extent. Due its location, and the requirement of the belt of countryside previously mentioned, the location of Boxted Wood is not considered an insurmountable issue to either option, however it is recommended that measures to conserve and enhance are sought through any eventual masterplanning, particularly for GCWB2.
- The northern boundary of both options abuts the Conservation Area of Great Saling which
 contains a range of listed buildings including grade II as well as the Registered Park and
 Garden of Saling Grove. Once more it is perceived that impacts are unlikely to be
 insurmountable and that the conservation or possible enhancement of the setting of these
 heritage assets can be ensured through adherence to Garden City Principles.
- Option GCWB2, in regard to its inclusion of the Great Saling airfield, may have

- archaeological implications, however further detail would be required as to the potential future of the airfield in any forthcoming masterplan.
- There are limited numbers of existing residential properties in the area of both options, however the small settlement of Blake End exists to the south west of the broad area and is located adjacent to a junction corresponding to the likely access to the area from the B1256. It should be noted that assimilation of Blake End is not assumed however, in so far as a required belt of surrounding countryside would act as a buffer, although there may be transport implications and perceived loss of amenity in that regard.
- Specifically in relation to GCWB2, additional considerations would be required in association with the amenity of residents in Stebbing Green and a desire to ensure separation. In isolation this is not considered an insurmountable issue however the presence of Boxted Wood within the area to the immediate east of any required buffer, could limit the suitability of this eastern part of the option.
- Both options do not benefit from an existing rail link and in addition links to the A120 and
 the strategic road network are likely to prove private car use attractive and it is uncertain
 whether there will be any benefits to the town centre through bus links only given the
 proximity and ease of access to Chelmsford and out of town centres such as Freeport.
- Connecting the options with Fitchway would provide direct links with Braintree and Braintree Railway Station. The establishment of links south of Fitchway would connect Skyline 120 for employment and Great Notley Country Park for leisure activity.
- Regarding public transport, the direct access of the site to the A120 can be considered
 advantageous in terms of connecting the site with North Essex inter-urban bus routes,
 providing connectivity with Stansted Airport and employment centres and the existing
 settlement.
- Options GCWB1 and GCWB2 have been assessed as having uncertain impacts on the
 town of Braintree. Positive impacts could reasonably be expected due to its close proximity
 and easy accessibility; however the lack of rail links to the centre and the similarly easy
 access to the strategic road network could see residents travelling to the larger centre of
 Chelmsford, or to Freeport to the south of Braintree but physically detached from the town
 centre.
- All of the Garden Community Options can be expected to have significantly positive
 impacts on housing, employment, mixed-use development opportunities and the
 incorporation of generous areas of publicly accessible open space, allotments/food
 production areas, biodiversity gains, SuDS and zero-carbon/energy-positive technology at
 this stage, and are all indistinguishable in regard to the opportunities of each option to
 adhere to relevant Garden City Principles.
- Options GCWB1 and GCWB2 have been highlighted as having constraints regarding the
 needs to invest in utility infrastructure, which consistent with the area's rural location is
 currently very limited in terms of physical networks and capacity. Option GCWB2 has
 additionally been highlighted as potentially allowing more flexibility regarding options for
 providing access from the A120/B1256 into the Garden Community, and commencing
 development of the new settlement relative to the operation and impact of the proposed
 quarry.

9.2.5 Cumulative Impacts of Garden Community Options

The following key points can be made regarding the cumulative appraisal of Garden Community options:

- It can be assumed that cumulative impacts could be realised on a small number of the Garden Community options through their geographic dispersal and scale. For instance, options that are grouped around the Colchester town area could give rise to cumulative negative impacts on accessibility, particularly a scenario where the larger East Colchester option (GCEC3) is progressed alongside either, but especially the larger, North Colchester option (GCNC2). These impacts can be expected to occur on the A12 and A120, particularly through disruption whilst any required upgrades to the strategic road network in north and east Colchester are being undertaken. There are also likely to be air quality impacts resulting from the selection of these options associated with the A12 and A120. It can also be expected that the selection of these two options would have negative impacts on landscapes and soil quality associated with the concentration of strategic development in north east Colchester.
- Regarding other options, it can be said that the geographic dispersal is such that no two
 other options would give rise to significant cumulative impacts that can not be mitigated at
 the strategic level, other than those associated with population increases more generally
 and in particular any resultant significant effects indicated as likely in a forthcoming Habitats
 Regulations Assessment or Appropriate Assessment.
- Although all impacts on the delivery of housing, employment and mixed-use development can be seen as significantly positive through the assessment of individual options, the cumulative impacts of focusing all required Garden Communities in the area of Colchester town (i.e. East Colchester, West Colchester and North Colchester options) can conversely be seen as negative across the HMA; there is a desire and requirement for strategic growth to supplement the growth requirements of the three authorities' Local Plans in order to address existing housing needs across the whole area and on a district level commensurate to the requirements of LPAs stated in the NPPF.

9.3 Key points from the assessment of policies SP8-SP10

The following key points can be made from the appraisal of Policies SP8-SP10:

- For all Policies SP8-SP10 there will be significant positive impacts associated with the majority of the Garden City principles, in consideration of each policy and the appraisal of relevant options within the assessment of Policy SP6. It should be noted that impacts are only relevant in the long term, associated with Garden Communities coming forward in the latter stages of the Plan period. Regarding Policy SP8, this also includes the impact on the regeneration areas within Colchester town centre and to the east of the town, due largely to the Policy content; in particular those related to sustainable transport, in conjunction with the general location of the option.
- An example where the policies will not ensure significant positive impacts against the
 Garden City Principles however relates to the aspiration that an appropriate percentage of
 homes that are classified as 'affordable' be for social rent. In addition, the policies are not
 explicit in a need to consider life-time homes; however do all include requirements for a mix
 of housing types and tenures. Positive elements however include the requirements for
 Gypsy and Traveller provision in Policies SP9 and SP10.

- Another area where the policies are only highlighted as having minor positive impacts is
 regarding zero carbon and energy positive technology. It is considered however that such a
 principle would require further discussion with relevant service providers and is not a
 principle that can be established at this early stage in the plan-making process. It is also
 considered that should the Garden Communities not include renewable energy
 technologies, the benefits of the development would outweigh adherence to this aspiration.
- All Policies will only have minor positive impacts on agricultural land and landscapes due to the loss of agricultural land associated with Greenfield development.
- The commercial viability of all options can be broadly said to be progressively more positive from east to west associated with property values. Despite this, for the purposes of this appraisal, all options have been deemed as commercially attractive in line with their inclusion as reasonable options that are viable, deliverable and achievable.
- Regarding Policy SP9, despite requirements ensuring the protection and/or enhancement
 of biodiversity assets within and surrounding the site including the Domsey Brook and
 Roman River corridors, there will be only minor impacts associated with impacts on sites of
 nature conservation interest; this is due to no specific mention of Marks Tey Brickpit SSSI.
 Any site option explored in Policy SP6 would have some degree of impact on this
 designation, as indicated by being in the SSSI's Impact Risk Zone (IRZ) which requires
 consultation with Natural England.
- Regarding SP10, despite requirements ensuring the protection and/or enhancement of
 heritage assets within and surrounding the site including Great Saling Hall conservation
 area and areas of deciduous woodland within and adjoining the site, there will be only
 minor impacts associated with impacts on the Registered Park and Garden of Saling
 Grove. Both site options explored in Policy SP6 could be expected to have some degree of
 impact on this designation, and this would have to be factored into any Masterplan.
- It can be said that cumulative and synergistic impacts can not be identified of the Garden Community options due to their geographical spread across the HMA. Despite this, the benefits that extend to wider areas beyond the Garden Communities themselves can be seen to strengthen significantly through the three Garden Communities. Largely these impacts regard social and economic benefits, in both rural areas and supporting the town centres of Colchester and Braintree.
- In addition, cumulative impacts can be expected to be significant in accumulation with the 'Part 2' of each of the authorities' Local Plans, which will look to build on this long term strategic growth with short and medium term solutions on a non-strategic level.

9.4 Recommendations

The following recommendations have been made throughout the appraisal of the Common Strategic Part 1 for Local Plans:

- Policy SP5 could be more explicit as to the requirements of new development in regards to
 the historic environment and assets and also possible biodiversity gain through green
 infrastructure. The Policy could also respond to aspirations to increase renewable energy
 generation in strategic scale development opportunities. There is also scope for the policy
 to regard surface water flood risk and in particular SuDS.
- Heritage assets exist across all of the Garden Community areas; additionally the sites could

- potentially contain archaeological remains that would need to be excavated. In consideration of this, Policy SP7 could include a principle that Masterplans seek ways to achieve quality and active management of heritage assets and the historic environment as part of a positive strategy for their conservation and enjoyment.
- At this stage of the plan-making process it can be considered that there is not sufficient information available for any of the Garden Community options to make detailed recommendations or suggest mitigation measures for individual sub-options. A general comment could be made however regarding the coverage or compatibility of the options against the sustainability objectives. The options will have to be carefully developed, through effective masterplanning, in order to positively adhere to issues surrounding physical limitations, in particular access arrangements to sites including strategies regarding permeability and interconnectivity within the new settlements.
- In addition, it can be seen that the majority of the Garden Community options will have considerations regarding a number of impacts associated with agricultural land, landscape, sites of nature conservation and the historic environment / heritage assets. It should again be acknowledged that such issues are not insurmountable at the scales of development proposed in the options and that effective masterplanning can even seek to enhance conditions. This is also true for issues surrounding existing residential amenity and coalescence, and the masterplanning process will have to seek to eradicate any negative impacts in this regard.
- Despite Policy SP9 requirements ensuring the protection and/or enhancement of biodiversity assets within and surrounding the site including the Domsey Brook and Roman River corridors, there is no specific mention of Marks Tey Brickpit SSSI. Any site option explored in Policy SP6 would have some degree of impact on this designation, as indicated by being in the SSSI's Impact Risk Zone (IRZ) which requires consultation with Natural England and this should be factored into any Masteplan.
- Despite Policy SP10 requirements ensuring the protection and/or enhancement of heritage
 assets within and surrounding the site including Great Saling Hall conservation area and
 areas of deciduous woodland within and adjoining the site, the policy could additionally
 mention the sensitivity of the Registered Park and Garden of Saling Grove. Both site
 options explored in Policy SP6 could be expected to have some degree of impact on this
 designation, and this would have to be factored into any Masterplan.

10 Next Steps

This Environmental Report will be subject to consultation. There are three statutory consultees that are required to be consulted for all Sustainability Appraisal and Strategic Environmental Assessment documents. These are:

- The Environment Agency;
- Natural England; and
- Historic England.

In addition to these, consultation will seek to engage the wider community in order to encompass comprehensive public engagement. The North Essex Authorities may additionally wish to invite comments from focussed groups, relevant stakeholders and interested parties.

PLEASE NOTE:

All comments on the content of this Environmental Report should be sent to each authority's online portal in line with the consultation arrangements of each's Local Plan Preferred Options consultation. Where consultation periods differ between each authority, the following links may need to be checked once consultation periods are live.

Comments should be focused on the detail of this SA that pertains to land use implications or issues relevant to each local authority area.

Please check the following links for more information, and direction to relevant consultation portals:

Regarding Braintree District Council:

https://www.braintree.gov.uk/info/200137/consultations/96/contribute to a council consultation

Regarding Colchester Borough Council:

http://www.colchester.gov.uk/article/12650/Consultations

Regarding Tendring District Council:

http://www.tendringdc.gov.uk/consultation

11 Monitoring

The significant sustainability effects of implementing a Local Plan must be monitored in order to identify unforeseen adverse effects and to be able to undertake appropriate remedial action. The Sustainability Framework contained in this report includes suggested indicators in order to monitor each of the Sustainability Objectives, however these may not all be collected due to limited resources and difficulty in data availability or collection.

Guidance stipulates that it is not necessary to monitor everything included within the Sustainability Framework, but that monitoring should focus on significant sustainability effects, e.g. those that indicate a likely breach of international, national or local legislation, that may give rise to irreversible damage or where there is uncertainty and monitoring would enable preventative or mitigation measures to be taken.

Upon adoption Local Plans will be accompanied by an Adoption Statement which will outline those monitoring indicators most appropriate for future monitoring of the Plan in line with Regulation 16 of the Environmental Assessment of Plans and Programmes Regulations 2004.





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