



SCOTT WILSON Planning & Environment
Sustainability Appraisal / Strategic Environmental Assessment
Guildford Borough Council Guildford Development Framework

Town Centre Area Action Plan Preferred Options
Sustainability Appraisal Report

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**SA / SEA Guildford Borough Council
Guildford Development Framework
Town Centre Area Action Plan
Sustainability Appraisal Report
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1 INTRODUCTION

1.1 Background

1.1.1 Scott Wilson was commissioned in 2006 by Guildford Borough Council to undertake the Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) of the Guildford Development Framework (GDF) Town Centre Area Action Plan (AAP) Preferred Options.

1.2 Sustainability Appraisal and Strategic Environmental Assessment

1.2.1 SEA is required by European and by English law. It involves the systematic identification and evaluation of the environmental impacts of a strategic action (e.g. a plan or programme). In 2001, the EU legislated for SEA with the adoption of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive'). The aim of the SEA Directive is *"to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes, with a view to promoting sustainable development"*.

1.2.2 The Directive was transposed into English legislation by the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulations'), which came into force on 21st July 2004. The SEA Regulations apply (with some specific exceptions) to plans and programmes subject to preparation and / or adoption by a national, regional or local authority or those prepared by an authority for adoption through a legislative procedure by Parliament or Government and are required by legislative, regulatory or administrative provisions.

1.2.3 SA extends the concept of SEA to encompass economic and social concerns and the Planning and Compulsory Purchase Act 2004 (PCPA) requires Local Planning Authorities to undertake SA for each of their Local Development Documents (LDDs), including AAP's like the Guildford Town Centre AAP. SA is therefore a statutory requirement for Local Development Frameworks (LDFs), such as the GDF, along with SEA.

1.2.4 The Government's approach is to incorporate the requirements of the SEA Directive into a wider SA process that considers economic and social, as well as environmental effects. To this end, in November 2005, the Government published guidance¹ on undertaking SA of LDFs that incorporates the requirements of the SEA Directive ('the Guidance'). The combined SA / SEA process is referred to in this document as Sustainability Appraisal (SA).

1.2.5 The Guidance advocates a five-stage approach to undertaking SA (see Figure 1.1). According to the Guidance, the Scoping Report should set out the findings of Stage A (which includes gathering an evidence base) together with information on what happens next in the process.

¹ ODPM (2005). Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks

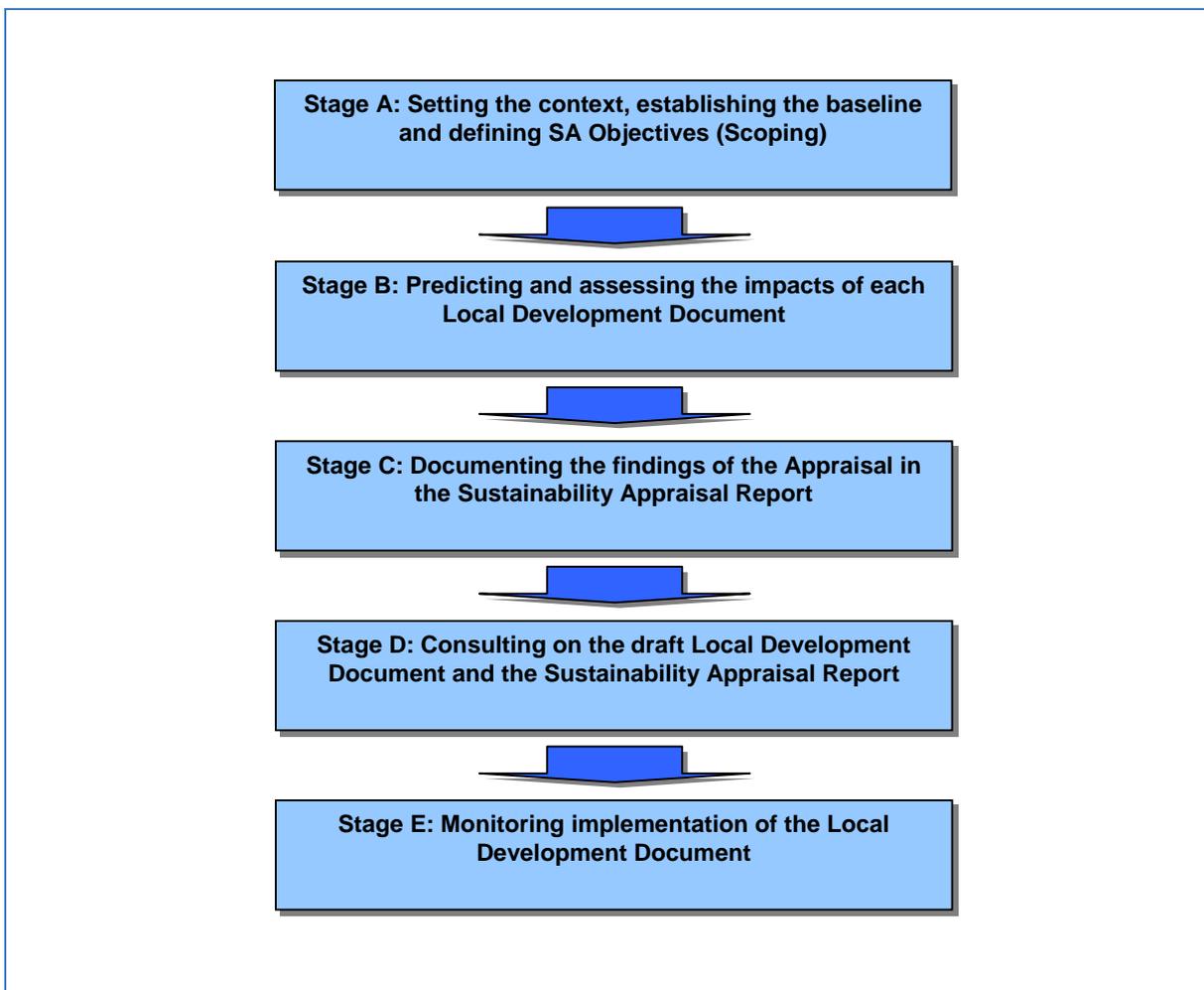


Figure 1.1: Five-stage approach to SA

1.3 Compliance with the SEA Regulations

- 1.3.1 The SEA Regulations set out a legal assessment process that must be followed. In light of this, Table 1.1 sets out the relevant requirements of the SEA Regulations and explains how these have been satisfied. The SEA Directive calls for an Environmental Report “*identifying, describing and evaluating the likely significant environmental effects of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme*”.
- 1.3.2 Government guidance is intended to integrate the requirements of the SEA Directive into the SA process. To comply with the Directive, Authorities are obliged to report on the environmental impacts of various alternatives considered before the plan is adopted, and the guidance calls for the SA Report to incorporate the elements of Environmental Report required by the Directive.

Table 1.1: Compliance with the SEA Regulations

Requirement	Where met
Contents and main objectives of plans and programmes that may affect the plan	Section 2 of this report
Relevant aspects of the current state of the environment and its likely evolution without the implementation of the plan	Within "Baseline" and "Likely future conditions" sub-sections of each topic paper or specialist section of this report
The environmental characteristics of the areas likely to be significantly affected	Within "Baseline" sub-section of each topic paper or specialist section of this report
Any existing environmental problems (issues) in particular those relating to areas designated under the Habitats and Birds Directives	Within the Biodiversity section of this report and where relevant within other sections
The environmental protection objectives which are relevant to the plan or programme, and the way those objectives have been taken into account in its preparation	Within the legislation sub-section of each specialist section
The likely significant effects on the environment (and economic and social impacts)	Within the "Likely significant effects of the Town Centre AAP Preferred Options" sub-section within each specialist section
The measures envisaged to prevent, reduce and as fully as possible offset any significant effects on the environment	Within the "Proposed Mitigation" sub-section within each specialist section and summarised in Section 19 of this report
An outline of the reasons for selecting the alternatives dealt with ...	Section 3 of this report
... and a description of how the assessment was undertaken, any problems, etc.	Section 3 of this report
A description of the measures envisaged concerning monitoring	Within the "Proposed Monitoring" sub-section within each specialist section and summarised in Section 20 of this report

2 BACKGROUND

2.1 Purpose of the SA Report

- 2.1.1 The SA Report documents the likely significant effects of the Town Centre AAP Preferred Options, makes recommendations concerning mitigation of negative effects and enhancement of positive effects, and proposes monitoring measures.

2.2 Plan objectives and outline of contents

- 2.2.1 Figure 1 (Appendix 2) shows the location of Guildford Town Centre, as proposed by the Council in the Town Centre AAP Preferred Options.
- 2.2.2 The Guildford Development Framework (GDF) Core Strategy Preferred Options set out a spatial vision for the Borough, one of inclusive and mixed local communities with good non-car access to high-quality local facilities, including good-quality educational, community and employment opportunities, sustained improvement in quality of life, based on the well-being of all citizens, the economic vitality, the wealth of the environment and the prudent use natural resources. Similarly the Town Centre AAP has a vision and objectives, which take account of the character and needs of Guildford Town Centre.

Guildford's Town Centre Area Action Plan

"A thriving, safe and vibrant town centre, accessible to all, which takes pride in its history and local identity. A centre for transport links and a focus for high quality, sustainable new developments sympathetic to the environment, providing opportunity and a balanced mix of uses, giving choice for future generations".

1. To deliver sustainable growth through the identification and linking of site opportunities for redevelopment and proposals for a diversity of land uses within the town centre, whilst protecting and enhancing the historic environment and utilising waste minimisation/recycling and energy and water efficiency methods wherever practicable;
2. To stimulate regeneration and other opportunities, where appropriate
3. To provide more housing in the town centre, particularly affordable housing for those unable to access market housing;
4. To provide for business and employment development needs within the town centre, particularly for existing local businesses;
5. To protect and enhance Guildford's town centre role as a regional shopping centre and as a focal point for social, cultural, arts, recreational, commercial and entertainment facilities and a safe, accessible environment for all;
6. To reduce the need to travel by car, to reduce congestion and improve public transport accessibility within and to the town centre;
7. To improve environmental quality and protect and enhance the distinctive historic character of the town centre;
8. To ensure adequate infrastructure and services are in place to support are in place to support new development.

Figure 2.1: The Spatial Vision and Key Objectives

Table 2.1. Comparison of SA Objectives and objectives from the Town Centre AAP

	1. Sustainable growth by redevelopment whilst enhancing the historic environment, waste management and water;	2. Stimulate regeneration and other opportunities;	3. Provide housing, particularly affordable housing for those unable to access market housing;	4. Provide business and employment development needs;	5. Protect and enhance the town centre, role as a safe / accessible, regional shopping, leisure and entertainment centre;	6. Reduce the need to travel by car, reduce congestion and improve public transport accessibility;	7. Improve environmental quality, protect and enhance the distinctive character of the town centre;	8. Ensure adequate infrastructure and services are in place to support new development.
1. To provide sufficient housing to enable people to live in a home suitable to their needs and which they can afford;	?	?	✓					
2. To facilitate the improved health and well-being of the population, including enabling people to stay independent and reducing inequalities in health;		?	?		?	✓	?	
3. To reduce the risk of flooding and the resulting detriment to public well being, the economy and the environment;	?	?						✓
4. To create and maintain safer and more secure communities;		?	?		✓			
5. To reduce poverty and social exclusion for all sectors of the community;			✓					
6. To create and sustain vibrant communities;	✓	✓	✓	?	✓		✓	
7. To make the best use of previously developed land and existing buildings, encouraging sustainable construction;	✓	✓	?					
8. To ensure air quality continues to improve and noise/light pollution is reduced;						✓		?
9. To conserve and enhance biodiversity within the plan area;							✓	
10. To protect, enhance and make accessible for enjoyment the natural, archaeological and historic environments and cultural assets of Guildford;	✓				?		✓	
11. To reduce road congestion and pollution levels;						✓		
12. To reduce the area of land affected by contamination and safeguard soil quality and quantity;	✓							
13. To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the Borough is prepared for its impacts;	?	?				✓		
14. To reduce the global, social and environmental impact of consumption of resources;	✓	?						?
15. To reduce waste generation and disposal, and achieve the sustainable management of waste;	✓	?						?
16. To maintain and improve the water quality of the region's rivers and groundwater, and to achieve sustainable water resources management;							✓	
17. To increase energy efficiency and the proportion of energy generated from renewable sources;	?	?						?

18. To maintain low rates of unemployment and high levels of economic activity, by improving skills, training and education, and access to these for all	✓	✓		✓				
19. To provide for appropriate commercial development opportunities to meet the needs of the economy	✓	✓		✓	✓			

2.2.3 The sustainability effects of these objectives are documented in Table 2.1 below, by cross-indexing them with the SA Objectives². If an objective from the Town Centre AAP is incompatible with an SA Objective, a cross (X) is used to highlight this. A question mark (?) indicates a potential incompatibility. A tick (✓) denotes that the objective from the Town Centre AAP is likely to contribute to the achievement of the SA Objective. Where no symbol is used this indicates that there is not likely to be an effect.

2.2.4 This exercise shows that the objectives of the Town Centre AAP are broadly compatible with the SA Objectives. The implementation of the objectives is crucial: those that are highlighted as potentially incompatible may not be so in practice.

² Note due to limited space, the objectives have been abbreviated in some cases

3 METHODOLOGY

3.1 Introduction

3.1.1 This chapter outlines the methods used to undertake the appraisal of the likely significant effects of the Town Centre AAP Preferred Options.

3.2 Sustainability Appraisal Scoping Report

3.2.1 The SA was carried in three stages. Firstly, the scope of the appraisal was defined in the SA Scoping Report (May 2006). This set out the context and objectives for the SA, collected baseline data and provided an initial appraisal of the options set out in the key issues and options paper. This can be found on the Council's website at:

www.guildford.gov.uk > Planning & Building Control > Policy Team > Local Development Framework > Sustainability Appraisal.

3.2.2 Elements of the Scoping Report are reproduced in this SA Report, in particular the baseline data and context review that were used to define the key sustainability issues.

3.3 Initial Sustainability Appraisal Report

3.3.1 Secondly, an appraisal of options for the Town Centre AAP was conducted in the spring of 2005. Guildford Borough Council took the results of this Initial Sustainability into account during the preparation of the draft AAP, using the findings of the report to help select Preferred Options.

3.4 Sustainability Appraisal Report

3.4.1 Finally, the draft Town Centre AAP itself was appraised. This report documents the outcome of this stage of the SA.

3.5 Method of assessment

3.5.1 The SEA Regulations require the assessment of the likely significant effects of the Town Centre AAP Preferred Options on issues such as:

- Air
- Biodiversity (including flora and fauna)
- Climate
- Cultural heritage
- Human health
- Landscape
- Material assets
- Population
- Soil
- Water
- And the interrelationship between the above factors

Table 3.1 Initial Assessment of the possible effects of indicative policies on the SA Topics

	Population	Human Health	Economy	Employment	Transport	Crime	Housing	Cultural Heritage	Climate	Air	Soil	Water	Biodiversity	Landscape
Preferred Options														
Housing – Provide more high density, high quality housing in the Town Centre, respecting existing character	X	?	X	X			X	X			X	X		X
Town Centre Facilities – Retain and improve existing public services and facilities. Encourage provision of new services and facilities	X	?		?	?									X
Environment – Continue to protect and enhance the Town Centre’s high quality historical and physical environments and improve those areas of lesser quality. Provide new public spaces where the opportunity arises								X	X			X		X
Offices and Other Business Development – Focus new office development within Guildford Town Centre Retain existing offices in office use	X			X	X		?	X			X	X		X
Shopping – Guildford Town Centre to be the main focus for major development comprising shopping and/or other main town centre uses			X	X	X			X			X	X		X
Movement – Limit parking provision within the Town Centre, to encourage use of other more sustainable modes. Seek to locate development generating significant numbers of trips to the Town Centre		X			X					X			X	
Tourism – Enhance the Town Centre’s role as a quality tourist destination			X	?	X			X						X
Energy Efficiency – Maximise energy efficiency and greater take-up of renewable energy measures in developments			X						X					
Infrastructure – Deliver the infrastructure requirements arising from each new development			X									X		
Future Development – To ensure all new developments in the Character Areas either <ul style="list-style-type: none"> Where the character has been maintained, ensures that new developments improves and enhances this environment or Where the character has been damaged or lost, ensures that new development repairs and improves the environment 								X						X
Development Sites														
Site 1: Guildford Station (Western Commercial Quarter Character Area)			X		X		X		X					
Site 2: Guildford Park Road Car Park (Western Commercial Quarter Character Area)					X		X							X
Site 3: The Friary Extension (Northern Historic Fringe Character Area)														
Site 4: Civic Hall (Eastgate Quarter Character Area)							X	X						X
Site 5: Bedford Road Car Park (Western Commercial Quarter Character Area)							X					X		
Site 6: Mary Road Car Park (Western Commercial Quarter Character Area)										X	X			X
Site 7: Land Adjoining the Electric Theatre (Bridge Street Character Area)			X		X			X				X		
Site 8: Former Farnham Road Bus Station (Southern Wey Corridor Riverfront Character Area)								X				X		
Site 9: Guildford Plaza (Southern Fringe Character Area)			X	X				X				X		X
Site 10: North Place Day Centre/Bellerby Theatre Site (Haydon Place and Martyr Road Character Area)							X							
Site 11: Bright Hill Car Park (Eastern Fringe Character Area)								X	X					X

3.5.2 Table 3.1 shows the initial assessment of potential effects of each indicative policy on the sustainability issues. This assessment does not distinguish between beneficial or adverse effects and takes no account of the significance of the effect.

It merely indicates that further investigation is required.

3.5.3 The SA process widens the scope of SEA to include social and economic factors. In this SA Report the following additional topics are discussed:

- Economy
- Employment
- Transport
- Crime and Safety
- Housing

3.5.4 This SA Report includes a chapter on each of the above subjects, structured in a series of topic papers, as follows:

- Introduction
- Legislation - the regulatory framework for the topic area (environmental topics only)
- Baseline - the current baseline in Guildford, where data is available, for the topic area
- Context Review - a review of related plans and programmes that have a bearing on the topic area, drawing on the context review undertaken by the Council in the SA Scoping Report
- Likely future conditions - probable conditions without the influence of the Preferred Options (i.e. the 'future baseline')
- Relevant SA Objectives
- Likely significant effects of the Town Centre AAP Preferred Options - including an assessment of any alternatives mentioned in the text
- Proposed mitigation - recommended measures to ameliorate adverse impacts or enhance beneficial impacts
- Proposed monitoring - recommended ongoing monitoring of significant effects

3.5.5 The options are compared to current policy under the Local Plan and significant effects are identified and discussed using the following criteria:

- Very beneficial
- Beneficial
- None / Neutral / Negligible
- Uncertain or insufficient information on which to determine
- Adverse

3.5.6 The Scoping Report includes a list of SA Objectives, these are reproduced below:

1. To provide sufficient housing to enable people to live in a home suitable to their needs and which they can afford
2. To facilitate the improved health and well-being of the population, including enabling people to stay independent and reducing inequalities in health
3. To reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment
4. To create and maintain safer and more secure communities

5. To reduce poverty and social exclusion by improving and encouraging inclusive access to opportunities for education, employment, recreation, health, community services, cultural activities and decision-making for all sectors of the community
 6. To create and sustain vibrant communities
 7. To make the best use of previously developed land and existing buildings, encouraging sustainable construction
 8. To ensure air quality continues to improve and noise/light pollution is reduced
 9. To conserve and enhance biodiversity within the plan area
 10. To protect, enhance, and where appropriate make accessible for enjoyment the natural, archaeological and historic environments and cultural assets of Guildford, for the benefit of both residents and visitors
 11. To reduce road congestion and pollution levels by encouraging and improving travel choice and reducing the need for travel by car/lorry, including by balancing the needs for employment and housing
 12. To reduce land contamination and safeguard soil quality and quantity (including agricultural land)
 13. To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the Borough is prepared for its impacts
 14. To reduce the global, social and environmental impact of consumption of resources by using sustainably produced and local products
 15. To reduce waste generation and disposal, and achieve the sustainable management of waste
 16. Maintain and improve the water quality of the region's rivers and groundwater, and to achieve sustainable water resources management
 17. To increase energy efficiency and the proportion of energy generated from renewable sources
 18. To maintain low rates of unemployment and high levels of economic activity, by improving skills, training and education, and access to these for all
 19. To provide for appropriate commercial development opportunities to meet the needs of the economy
- 3.5.7 These are used to appraise the cumulative effects of the Town Centre Area Action Plan Preferred Options. The cumulative appraisal is presented at the end of this report in Chapter 18.

4 POPULATION

4.1 Introduction

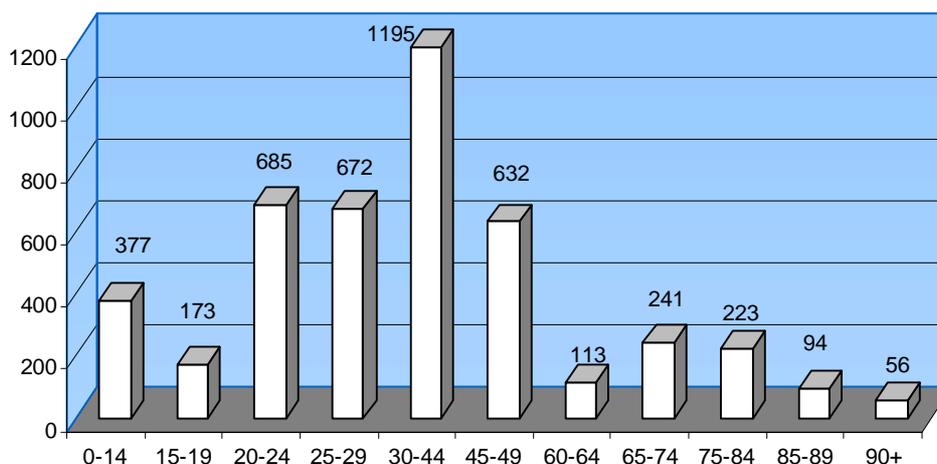
4.1.1 This chapter discusses the present and future population structure of Guildford Town Centre, and the likely effects of the Town Centre AAP Preferred Options on that population.

4.2 Population Baseline in Guildford

4.2.1 The total population of Guildford Town Centre is 4,392 (Source: www.guildford.gov.uk). This is 3.4% of the total Borough population. 30% of those who live in the Town Centre are aged 20-29 and 27% are aged 30-44. The average age of the population in the Town Centre ward of Friary and St Nicolas is 33.4 years. This compared with an average age for England and Wales of 38.7 years. There is a small proportion of people aged 65+ (14%).

4.2.2 The total population and breakdown by age structure in the Town Centre are shown in Figure 4.1 below.

Figure 4.1 Population Age structure



Source: Data from Guildford Borough Council Town Centre Profile (www.guildford.gov.uk)

4.2.3 Deprived areas within the Borough are shown in Figures 7 and 7a (Appendix 2).

4.2.4 As illustrated in Table 4.1 below the main ethnic group in the Town Centre ward of Friary and St Nicolas is white British, with a minority Asian and Black community. The Town Centre ethnic profile appears reasonably representative of that of the Borough as a whole.

Table 4.1: Percentage of resident population in each group (April 2001)

Ethnic Group	Friary and St Nicolas Ward	Guildford
White	94.8	95.9
White; British	85.6	90.4
White; Irish	1.5	1.0
White; Other White	7.7	4.5
Ethnic Group - Percentages; Mixed	1.5	0.9
Mixed; White and Black Caribbean	0.2	0.2
Mixed; White and Black African	0.3	0.1
Mixed; White and Asian	0.5	0.4
Mixed; Other Mixed	0.5	0.3
Asian or Asian British	1.7	1.4
Asian or Asian British; Indian	0.9	0.7
Asian or Asian British; Pakistani	0.1	0.2
Asian or Asian British; Bangladeshi	0.2	0.1
Asian or Asian British; Other Asian	0.5	0.4
Black or Black British	0.7	0.6
Black or Black British; Caribbean	0.2	0.3
Black or Black British; African	0.5	0.3
Black or Black British; Other Black	0.1	0.1
Chinese or Other Ethnic Group	1.3	1.2
Chinese or Other Ethnic Group; Chinese	0.7	0.6
Chinese or Other Ethnic Group; Other Ethnic Group	0.6	0.5

Source: National Statistics

4.3 Context Review

4.3.1 Key messages from the context review include:

Key Messages from the Context Review	Evidence Source
Ensure that development supports existing communities and contributes to the creation of safe, sustainable and liveable communities with good access to jobs and key services	Planning Policy Statement 1 (2004)
Public participation: people of all ages should be more active in decision making, with more information and training opportunities	Guildford Local Agenda 21 Strategy (2000)
Ensuring that benefits are accessible to all, regardless of disadvantage or vulnerability. To embrace diversity and equality of opportunity, involvement, rural issues, accessibility and community facilities.	Guildford Community Plan (2003)

4.4 Likely future conditions

4.4.1 It is likely that the population of Guildford Town Centre will continue to grow at a modest rate. Guildford Borough Council's profile of the Town Centre suggest that the predicted population changes will include a future growth in the 45 - 64 age group and a fall in the economically active 30 - 44 age group. The older retirement group (those 80 and over) will also grow. The average age of the population of the Town Centre is thus expected to increase in the longer term and this will lead to an increasing requirement for appropriate housing for more elderly residents.

4.5 Relevant SA Objectives

- To reduce poverty and social exclusion
- To create and sustain vibrant communities

4.6 Likely significant effects of the Town Centre AAP Preferred Options

4.6.1 The Town Centre AAP Preferred Options are likely to influence the total population by making provision for housing and employment within the Town. New dwellings support capacity for both the predicted reduction in average household size and also some element of in-migration.

Preferred Option: Housing

4.6.2 The Preferred Option for future additional housing, derives from the Core Strategy focus on increasing levels of new houses within the Town Centre (rather than on green field sites). The levels of affordable housing on new development sites meeting the policy threshold will increase from 30% to 35%. The overall growth in housing within the Town Centre will inevitably lead to an increase in the population of all age groups in the future. It is likely that high-density housing will attract the younger age groups, which could potentially balance the growth in the 45-64 age group and the decline of the 30-44 age group. The increase in the affordable

sector should also facilitate the retention and in-migration of key workers.

- 4.6.3 The requirement for affordable housing should assist in reducing social exclusion although no significant effects are likely solely on the basis of the preferred option for housing.

4.7 Proposed mitigation measures

- 4.7.1 None proposed.

4.8 Proposed monitoring

- 4.8.1 The following indicators are proposed as part of the SA Monitoring Framework. These indicators are the same as those proposed for the Core Strategy although they would be collected for the Town Centre (the Town Centre ward of Friary and St Nicolas and Town Centre census output areas are suitable proxies if this is not possible):

- Total population
- Population density per square kilometre
- Population structure by age
- Population structure by sex
- Population structure by ethnic background
- Population structure by social grade

5 HEALTH

5.1 Introduction

5.1.1 Health can be defined as a state of complete physical, mental and social well-being and not merely the absence of disease. This topic paper discusses how the Town Centre AAP is likely to influence public health both in the Town Centre and beyond.

5.2 Health Baseline in Guildford

5.2.1 The 2001 Census carried out a survey of the perceived health of the people. The Census recorded self-assessed levels of personal health over the preceding 12 months using broad categories of 'good', 'fairly good' or 'not good'. It also investigated incidences of limiting long-term illness, health problems or disabilities that restricted daily activities. Table 5.1 below summarises the responses of the residences in the Town Centre ward of Friary and St Nicolas. As might be expected, the ward is generally representative of the Borough as a whole in health terms although, for unknown reasons, there are fewer people with limiting long-term illnesses, as shown in Table 5.2.

Table 5.1: Self-assessed health status (2001)

	Friary and St Nicolas Ward	Guildford Borough
General Health: Good	74.8%	75.2%
General Health: Fairly Good	19.5%	19.1%
General health: Not good	5.7%	5.7%

Table 5.2: Long-term illness (2001)

	Friary and St Nicolas Ward	Guildford
People with a limiting long-term illness	12.6%	12.9%
People of working age with a limiting long-term illness	8.6%	8.3%
Households with one or more person with a limiting long-term illness	22.1%	25.6%

Source: National Statistics

5.2.2 The Indices of Deprivation 2004 (Source: www.neighbourhood.statistics.gov.uk) ranked the Health Deprivation of the Friary and St Nicolas at 30,078 (of a total of 32,482, where 1 is the most deprived). This confirms that the health profile of Guildford Town Centre is substantially better than the English average.

5.3 Context Review

5.3.1 Key messages from the context review include:

Key Messages from the Context Review	Evidence Source
Ensuring a "strong" and "healthy" society is a key feature of sustainable development	One Future – Different Paths: UK framework for sustainable development (2005)
The Vision of the South East Plan is for a 'healthy region', through the Plan and other measures, the South East will show a sustained improvement in its quality of life over the period to 2026, measured (among other things) by the health and well-being of its citizens	The South East Plan Core Document, Draft for Public Consultation (2005)
Regional Objective 3 " To improve the health and well-being of the population and reduce inequalities in health"	Part of the Integrated Regional Framework 2004: A Better Quality of Life in the South East.
"Promoting or improving the economic social and environmental well-being of their areas" and "promote healthier lifestyles".	Local Strategic Partnership (LSP) and Community Plan (2003)

5.4 Likely future conditions

5.4.1 It is assumed that the profile of above average health of the population of the both the Borough and the Town Centre will be maintained in the short term. However in the longer term the average health of the residents in the Town Centre may decline as the average age of the population increases (See Population Topic Paper).

5.5 Relevant SA Objectives

- To facilitate the improved health and well-being of the population

5.6 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option: Town Centre Facilities

5.6.1 Increasing the provision of open space in the Town Centre and particularly any sports facilities associated with these would be beneficial to the health of residents and others that use the Town Centre. The provision of open space in association with new developments is an existing Borough wide policy objective of the Local Plan (e.g. R2, R3) and a review of the proposed development sites within the Town Centre AAP (see Landscape Section) suggests that there is unlikely to be a substantial increase in the extent of open space, given the constraint of the Town Centre's historic layout. The overall effect is judged to be neutral.

Preferred Option: Movement

5.6.2 This option promotes sustainable transport modes including walking and cycling, which are both beneficial to maintaining good health. The option is fully in accordance with existing Local Plan policy (e.g. M6). Although beneficial no significant effects on the relevant SA health objective are likely.

5.7 Proposed mitigation measures

5.7.1 The following mitigation measures are proposed:

- Preferred Option - Movement: The improvements to cyclist and pedestrian routes should make reference to safety

5.8 Proposed monitoring

5.8.1 The following indicators to measure health outcomes are proposed as part of the SA Monitoring Framework. These indicators are the same as those proposed for the Core Strategy although they would be collected for the Town Centre (the Town Centre ward of Friary and St Nicolas and Town Centre census output areas are suitable proxies if this is not possible):

- Hospital Episode Statistics
- Life Expectancy at Birth
- Average life expectancy
- Number of cases of limiting long-term illness
- Crude Death rate per 1,000 population and Standardised Mortality Rate
- Mortality (all ages) from accidents per 100,000 population

6 ECONOMY

6.1 Introduction

6.1.1 The performance of the economy has a fundamental bearing on the achievement of sustainable development. It has both beneficial and adverse effects. On one hand there are negative aspects, such as pollution from industry or traffic, while on the other hand the economy provides employment and generates wealth. A sustainable economy should be seen as a part of the wider social and natural environment and, as far as possible, should not have deleterious effects on the environment.

6.1.2 This chapter examines the effects of the Town Centre AAP Preferred Options on economic development within the Town Centre.

6.2 Economic Baseline in Guildford

6.2.1 The following baseline is the economic baseline for Guildford Borough whilst stand-alone economic data for the Town Centre is being gathered, including the preparation of an employment needs assessment). However as much of the Borough's commercial activity occurs within the Town Centre, the Borough-wide baseline is likely to be reasonably representative of that of the Town Centre.

6.2.2 Guildford is an economically prosperous Borough with over 5000 businesses; Table 6.1 below shows the breakdown of businesses by sector (in each case the number is followed by % of total).

6.2.3 It should be noted that the data in Table 6.1 is for VAT Registered businesses only and therefore does not include all business in the Borough, notably sole traders or small businesses with a turnover of less than £55,000 per annum. Nevertheless it suggests that the economic profile of Guildford is similar to that of the South East as a whole, with the obvious exceptions of construction and property/business services. The former sector represents substantially less of the economy than the regional and national averages whilst the latter is substantially greater.

Table 6.1: Counts of VAT Based Enterprises by Broad Industry Group (2005)

Sector	Guildford		South East		Great Britain	
Agriculture	130	3%	10,315	4%	86,635	6%
Production	300	6%	19,870	8%	120,880	9%
Construction	95	2%	33,145	13%	160,38	12%
Motor trades	180	4%	10,140	4%	56,340	4%
Wholesale	280	6%	15,480	6%	92,980	8%
Retail	375	7.5%	23,645	9%	154,640	11%
Hotels & catering	205	4%	14,965	6%	93,745	8%

Transport	100	2%	8,145	3%	49,520	4%
Telecommunications	35	0.7%	2,295	1%	13,175	1%
Finance	45	0.9%	1,430	0.5%	9,200	0.5%
Property & business services	2,165	43%	88,705	35%	413,645	30%
Education	50	1%	2,200	1%	10,360	1%
Health	45	0.9%	1,485	0.5%	7,765	0.5%
Public Admin & Other Services	480	10%	23,975	9%	116,970	9%
Total	4,980		255,790		1,386,240	

Source: National Statistics

6.2.4 The number of VAT-registered businesses in the Borough declined very slightly between 2003 and 2004 with de-registrations exceeding registrations as demonstrated in Table 6.2. This compares with a very minor decrease in the South-East (unlikely to be statistically significant) and a minor increase in Great Britain:

Table 6.2: VAT Registrations and business stock (2004)

	Guildford		South East		Great Britain	
	2003	2004	2003	2004	2003	2004
VAT Registration Rate	590	525	30,470	28,360	189,115	181,415
VAT De-Registration Rate	535	550	26,875	28,245	167,630	179,370
Business Stock	5,680	5,655	287,055	287,175	1,817,820	1,819,870

Source: VAT Statistics - DTI

6.2.5 Guildford is a key retail centre in the sub-region and has 1,120 retail premises (including shops, financial and professional services and food and drink outlets, but excluding public houses and hotels). Other businesses include 1,281 office premises, 416 factories and 342 warehouses. Approximately 15 per cent of total office stock in the Borough is now vacant (Source: Guildford Borough Council.)

6.2.6 The Town Centre is dominated by 'comparison goods retailing', occupying 72.5% of the total floor space in the centre, according to the most recent Goad Centre Report (October 2005). The total number of retail units including miscellaneous properties (i.e. under construction and vacant) is 515. This includes 26 convenience stores, 313 comparison stores and 145 units accommodating services. There were 17 vacancies at the time the Retail Needs Assessment survey was carried out.

6.3 Context Review

6.3.1 Key messages from the context review include:

Key Messages from the Context Review	Evidence Source
<p>Ensure that there is sufficient land available which is capable of development and is well served by infrastructure</p> <p>Ensure that there is a variety of sites available to meet differing needs</p> <p>Encourage the re-use of urban land</p>	PPG4 Industrial, commercial development and small firms ODPM, 1992
Need to ensure steady and sustainable levels of economic growth, capitalising on the region's strengths and the opportunities to increase productivity	South East Plan: South East England Development Agency (SEEDA), 2002
<p>Facilitate innovation throughout the economy</p> <p>Raise productivity</p> <p>Encourage the most efficient and effective use of land and property</p> <p>Reduce dependency on the road network; and</p> <p>Promote a culture of corporate responsibility.</p>	Surrey Structure Plan: Surrey County Council, 2004
<p>Support the maintenance and renewal of the Local Economy</p> <p>This involves retaining the existing broad supply of employment land in the Borough by resisting the loss of existing employment land to other uses.</p>	Guildford Borough Local Plan: Guildford Borough Council, 2003

6.4 Likely future conditions

6.4.1 All local economies are profoundly influenced by national and international economic conditions and Guildford is no exception. The future success of the Borough's economy rests to a great extent on factors beyond the control of the Council or even the UK Government.

6.4.2 In common with other parts of the South East, having good links to London, Heathrow Airport and continental Europe, Guildford enjoys many economic advantages compared to the rest of Great Britain. However the economic success of Guildford is likely to mirror that of the South East and it is likely that dominant business sectors will continue to be business services and retail. Based on recent trends, the business stock is likely to remain relatively stable in terms of mix and overall totals with a low turnover of VAT registrations / de-registrations.

6.5 Relevant SA Objectives

- To reduce poverty & social exclusion,
- To create and sustain vibrant communities, Government,
- To maintain low rates of unemployment and high levels of economic activity, by improving skills, training and education
- To provide for appropriate commercial development opportunities to meet the needs of the economy

6.6 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option: Housing

- 6.6.1 The Housing Preferred Option does not appear likely to have any major new economic implications on the Town Centre. The existing wording "more high density" could however be construed as a preference for increasing further the annual rate of build and / or the density of housing over existing rates. Rejuvenation of areas through redevelopment of sites to provide higher capacity, high quality living environments should attract additional inward investment into the Town Centre whilst the economy of the Town Centre and the wider Borough will benefit through both the construction of the dwellings themselves and the demand for goods and services created by new local residents.
- 6.6.2 In contrast to this beneficial economic effect are the possible adverse economic effects of the 5% increase in affordable housing proposed in the Preferred Option which will lead to an increased unit cost to developers. The Knight Frank study demonstrated, however, that the delivery of 35% affordable housing should not prejudice the financial viability of and indicates that a threshold of 35% would be economically sustainable³.
- 6.6.3 The overall effect of the Preferred Option is hard to assess with certainty but, whether beneficial or adverse, the net effect is likely to be small and, hence, not significant.

Preferred Option: Offices and other business development

*"The annual take-up of office space in Guildford Borough has varied extensively over the past 6 years, experiencing a sharp decrease of 85.7% between 2001 and 2002, but has subsequently seen a significant increase since 2003. This trend is similar to that experienced by Woking"*⁴.

- 6.6.4 Given that the increasing annual take-up of office space in the Borough this option should have beneficial effects for economic growth by supporting demand in both Guildford Town Centre and the wider Borough. Concentrating new development in the Town Centre where accessibility is greatest enables both the workforce and customers/clients to use sustainable methods of transport.
- 6.6.5 Approximately 15 per cent of office stock in the Borough is vacant; an appraisal of vacant stock in the Town Centre could ascertain the condition, and likely reasons for vacancy here (the Council is currently preparing an Employment Needs Assessment). This Preferred Option would require such office space to be upgraded or replaced with new office development. It may be necessary to assess each site on a case-by-case basis to ensure new office stock is the most efficient use for the site.

³ Knight Frank Housing Market Assessment (2003) as referred to in the Town Centre Area Action Plan Preferred Options consultation document June 2006 Guildford Borough Council

⁴ A Profile of Guildford Borough - Past and Future Trends Updated April 2006
<http://www.guildford.gov.uk/nr/rdonlyres/2e635335-e8ac-44c4-9de9-8deec4047563/0/profilepastandfuturetrendsupdatedapril2006.pdf>

- 6.6.6 The overall effect of the Preferred Option is likely to be modestly beneficial and hence, not significant.

Preferred Option: Shopping

- 6.6.7 The Retail Needs Assessment identified a requirement for additional retail floor space up to 2011. The Preferred Option would deliver all the additional floor space required to 2011, through the Friary Extension Development. Under this option, after 2011 a further assessment would be required to consider retail need for the period up until 2018.
- 6.6.8 In addition to the provision of additional floorspace the retention of existing retail units would contribute to the AAP Plan Objective “to protect and enhance Guildford’s Town Centre role as a regional shopping centre”. Retention of retail units that are currently unprofitable should only be enforced where supported by the Retail Needs Assessment. Where there is sound and justified reasoning for a change of use for the purposes of regeneration, each site should be considered on a case-by-case basis. The reason for this is to improve efficiency of land use where possible.
- 6.6.9 This option is judged to have minor beneficial effects on the economy and is in broad accordance with the policy context of the Local Plan (e.g. policy S1). The effects on the relevant SA objectives are not judged to be significant.

Preferred Option: Tourism

- 6.6.10 Additional tourist accommodation proposed by this option should generate extra tourist revenue and can therefore be judged as having positive effects on the economy. Tourist accommodation included as part of the Railway Station redevelopment will benefit from good transport links and this will also facilitate and encourage visitor movements. An enhanced supply of quality visitor accommodation may encourage more business trips and use of the Town Centre as a business meeting point. Encouraging ‘business tourism’ could be considered as part of the town’s role as a quality tourist destination.
- 6.6.11 The proposed enhancements to existing visitor attractions arising from the Cultural Strategy referred to within this preferred option should also generate additional revenues from tourism and thus be modestly beneficial to the economy of both the Town Centre and the Borough.
- 6.6.12 The hotel proposals are in broad accordance with existing Local Plan policy (e.g. Policy T3) and the effects of the enhancements to existing visitor attractions are likely to be modest, as appropriate tourism and additional visitor accommodation are both already encouraged through the Local Plan. The overall effects of the preferred option on the economy and the relevant SA objectives are unlikely to be significant.

Preferred Option: Energy Efficiency

- 6.6.13 This option refers to *major* new developments. Indicative Policy TCG 1 (Energy

Efficiency and Renewables in Guildford Town Centre) provides additional detail in respect of development size thresholds that would trigger consideration of energy design advice and feasibility studies for Combined Heat & Power (CHP).

- 6.6.14 There is potential for negative effects from this option on the viability of some developments, where the costs of energy efficiency and renewable energy technologies may be too great a proportion of the overall development costs. The payback periods for renewables infrastructure are typically long and despite modest benefits that accrue from reduced energy bills and enhanced image, the capital costs are seen as far outweighing any longer term benefits by most developers. The Town Centre AAP Preferred Option (and the related Core Strategy Preferred Option) extend well beyond the equivalent existing Local Plan policy (e.g. G1(9)), therefore minor negative economic effects on the Town Centre and Borough may occur. Conversely, Chapter 12 discusses the positive sustainability benefits in terms of energy/use of natural resources.
- 6.6.15 In addition, mitigation for this economic effect is to some extent embedded within the Preferred Option by the suggestion that major new developments be coordinated to maximise possible benefits of the policy and to improve the cost-effectiveness of implementing the energy measures, potentially reducing the costs to individual developers.

Preferred Option: Infrastructure

- 6.6.16 Infrastructure planning benefits as assessed under "Preferred Option Planning Benefits" in the Core Strategy SA. These will provide social, environmental and economic infrastructure at additional capital cost to the developer. Since the costs to individual businesses are re-invested in infrastructure that supports the wider economy it is considered that effects on the economy are judged to be neutral both at the Town Centre and the Borough level.

6.7 Proposed mitigation measures

- 6.7.1 None proposed.

6.8 Proposed monitoring

- 6.8.1 The following contextual indicators could be incorporated in the SA Monitoring Framework:
- VAT registrations and de-registrations (from National Statistics) for the Town Centre as well as the Borough for comparison
 - Developments of sites of 5 dwellings or less (in relation to Indicative Policy TCG 1)
 - Vacant office space within the Town Centre

7 EMPLOYMENT

7.1 Introduction

7.1.1 The previous chapter concerned the economy of Guildford and the likely significant effects on business resulting from the Town Centre AAP Preferred Options. This chapter deals specifically with the significant effects on employment. Clearly any expansion or contraction of the economy is likely to have an indirect effect on employment in the Borough and this is the overall context in which this chapter should be read.

7.2 Employment Baseline in Guildford

7.2.1 The following baseline is the economic baseline for Guildford Borough whilst stand-alone economic data for the Town Centre is being gathered (including an employment needs assessment). However as many of the Borough's population are employed within the Town Centre, the Borough-wide baseline is likely to be reasonably representative of that of the Town Centre.

7.2.2 According to mid-year population estimates (National Statistics, 2004) there are a total of 84,400 people of working age in Guildford (64.6% of the total population). The current unemployment rate in the Borough is 1.7% of which 0.9% (769) people are claiming Job Seekers Allowance, compared to 1.4% in the South East and 2.2% in Great Britain. The un-employment rate is thus slightly lower than the average for the South East as a whole and substantially lower than the national average.

7.2.3 Table 7.1 outlines the employment status of the population for ages 16-74.

Table 7.1: Employment Status (2004)

Employment status of people 16-74	Guildford	South East	England and Wales
Employees Full-time	44.5%	43.2%	40.6%
Employees Part-time	11.1%	12.2%	11.8%
Self-employed	10.3%	9.6%	8.3%
Unemployed	1.7%	2.3%	3.4%

Source: Neighbourhood Statistics

7.2.4 The following table shows the breakdown of employment in Guildford by industry. It clearly indicates that the highest percentages of jobs are in the service industry with the lowest numbers in the construction and transport and communications industries. This confirms the data set in the Economic topic paper.

7.2.5 The public administration, education and health sector provide a higher proportion of the jobs than the South East or national averages. This reflects the presence of the University of Surrey, which employs 2,500 people as well as the Surrey Research Park, and the Royal Surrey County Hospital, which are also located

within the Borough.

Table 7.2: Workforce by employment sector (percentage of total) (2001)

Sector	Guildford (employee jobs)	Guildford (%)	South East (%)	GB (%)
Manufacturing	4,782	7.1	9.4	11.9
Construction	2,188	3.3	4.1	4.5
Services	59,700	89.0	84.8	82.1
Distribution, hotels & restaurants	17,497	26.1	26.3	24.7
Transport & communications	2,198	3.3	5.8	5.9
Finance, IT, other business activities	15,710	23.4	23.2	20.0
Public admin, education & health	21,148	31.5	24.5	26.4
Other services	3,148	4.7	5.0	5.1
Tourism-related	5,089	7.6	8.3	8.2
Total	67,069	-	-	-

Source: Official labour market statistics 2004

7.2.6 Table 7.3 demonstrates that the average weekly pay in Guildford is significantly higher than South East and the national average.

Table 7.3: Gross weekly pay of Guildford residents (2005)

Gross weekly pay	Guildford	South East	Great Britain
Full Time Workers	£554.10	£467.90	£433.10
Male Full Time Workers	£613.40	£521.20	£474.90
Female Full Time Workers	£453.90	£392.90	£372.30

Source: Annual survey of hours and earnings - resident analysis (2005)

7.2.7 This high level of pay reflects at least in part the high skills level in the Borough. Table 7.4, which is based on Guildford's working age population, indicates that 37.8% (30,200) of the population are qualified to degree level, which is substantially higher than the South East and national averages. The pattern of a highly skilled workforce, in comparison to regional and national averages, is reflected across all skill levels:

Table 7.4: Qualifications (2003-2004)⁵

Skills level	Guildford (numbers)	Guildford (%)	South East (%)	GB (%)
1 and above	66,900	83.6	81.1	76.0
2 and above	58,800	73.6	66.0	61.5
3 and above	46,600	58.2	46.9	43.1
4 and above	30,200	37.8	28.5	25.2
Other Qualifications	7,000	8.8	8.0	8.8
No Qualifications	6,100	7.6	10.8	15.1

Source: National Statistics

7.3 Context Review

7.3.1 Key messages from the context review include:

Key Messages from the Context Review	Evidence Source
Ensure that sufficient employment land is provided through redevelopment and brownfield sites and refurbishment of existing stock to provide new and flexible employment space	Regional Economic Strategy – SEEDA, 2005
New employment should be focussed around areas where people live and can easily access jobs without having to travel by car	PPG 4: Industrial, commercial development & small firms - ODPM 1992
Maintain the current supply of employment land	Guildford Borough Local Plan - Guildford Borough Council, 2003

7.4 Relevant SA Objectives

- To maintain low rates of unemployment and high levels of economic activity, by improving skills, training and education

7.5 Likely future conditions

7.5.1 Forecasts suggest that the number of people working in the Borough is set to rise from 67,069 in 2004 to 85,100 by 2010 (Guildford Community Plan, 2003).

7.5.2 Guildford's unemployment is low with 0.9% of the population claiming Job Seekers Allowance in February 2005 (Source: NOMIS), which compares favourably with the South East and Great Britain averages. Whilst the national economy continues with its recent pattern of modest growth there is no reason to expect substantial changes in the levels of unemployment in Guildford, either in real or relative terms.

⁵ Other qualifications: includes foreign qualifications and some professional qualifications
 NVQ 1 equivalent: e.g. fewer than 5 GCSEs at grades A-C, foundation GNVQ, NVQ 1
 NVQ 2 equivalent: e.g. 5 or more GCSEs at grades A-C,
 NVQ 3 equivalent: e.g. 2 or more A levels
 NVQ 4 equivalent and above: e.g. HND, Degree and Higher Degree level qualifications or equivalent

- 7.5.3 The average pay in the Borough has been growing steadily since 1998. On the basis of this trend and given the prevailing economic climate, it is reasonable to conclude that the average pay of Guildford residents will continue to rise, this being driven in particular by very high levels of average pay amongst male workers. The discrepancy in wages between male and female workers may also continue to grow although in real terms the wages of both sexes are likely to remain higher than corresponding wages elsewhere.
- 7.5.4 It also seems likely that the skill level in the Borough will remain high with the proportion of people educated to degree standard or similar being much higher than regional and national averages.

7.6 Significant likely effects of the Town Centre AAP Preferred Options

- 7.6.1 Since employment is heavily dependent on the health of the economy, this assessment should be read in conjunction with the previous chapter on the economic effects of the Town Centre AAP Preferred Options. Planning policies cannot create jobs but can assist in creating the circumstances for investment to stimulate growth.

Preferred Option: Housing

- 7.6.2 This option is judged to be beneficial for employment in the Borough by accommodating the anticipated modest increases in the resident workforce, which will serve the corresponding growth in employment opportunities. There will also be construction jobs associated with the development of the new housing itself. However, given the high levels of existing employment, the apparent stability of the local economy, the effects on employment of this option and the relevant SA objective will not be significant.

Preferred Option: Town Centre Facilities

- 7.6.3 This option is likely to be beneficial in respect of the retention of public services and facilities jobs and perhaps also through job creation within this sector. The effects on employment and the relevant SA objective of this option will not, however, be significant.

Preferred Option: Offices and other business development

- 7.6.4 The provision of new and the retention of existing office space in the Town Centre will support employment by ensuring there is space and opportunity for new business start-ups and in-migration of businesses providing additional jobs in the Town Centre. The focus on the Town Centre may encourage people to work there who might otherwise have worked elsewhere within the Borough. Since the long-term effect is likely only to be a trend of local displacement in employment location, the effects on employment of this option at the scale of the Borough are not likely to be significant.

Preferred Option: Shopping

- 7.6.5 As for the Preferred Option - Offices and other business development (see above), the focus on the Town Centre may further increase the number of people working in the retail sector in the Town Centre, who might otherwise have worked elsewhere within the Borough. The long-term effect is thus likely only to be a trend of local displacement in employment location.
- 7.6.6 The Friary Extension Development identified in this option would provide a significant number of additional jobs in the Town Centre and will be beneficial to employment during both construction and completion. As this development is already allocated in the Local Plan, to some extent the beneficial effects of the additional employment have already been identified. Therefore, whilst generally beneficial overall, no significant effect is predicted on employment arising from this Preferred Option.

Preferred Option: Tourism

- 7.6.7 The provision of new tourist accommodation would provide a modest number of additional jobs in the Town Centre and the protection and enhancement of existing tourist attractions may create further jobs. Overall, whilst generally beneficial, no significant effect of the preferred option is predicted on employment.

7.7 Proposed mitigation measures

- 7.7.1 No mitigation measures have been proposed, the Preferred Options that have an effect on employment are all judged to provide beneficial effects for employment largely due to job creation.

7.8 Proposed monitoring

- 7.8.1 The following contextual indicator could be incorporated in the SA monitoring Framework.
- Percentage of the workforce employed in tourism, office and retail in Guildford Town Centre.

8 TRANSPORT

8.1 Introduction

- 8.1.1 Sustainable transport is key to the wider sustainable development agenda. An efficient transport network is a pre-requisite of a successful, modern economy. A safe and accessible transport network helps fulfil society’s social objectives, while a low-pollution transport network is essential to safeguard the environment and climate. Reconciling these, often conflicting, requirements is at the heart of the planning process.
- 8.1.2 This chapter explores the likely effects of the Town Centre AAP Preferred Options, Indicative Policies and Development Sites on transport.

8.2 Transport Baseline in Guildford

- 8.2.1 The following information is the transport baseline for Guildford Borough. Stand-alone transport data for the Town Centre is not readily available, although research is being undertaken on specific topics e.g. GWITS study⁶. In general it is likely that within the Town Centre, average levels of car ownership of residents will be slightly lower than Borough average (due to parking provision rather than financial constraints) and use of public transport will be greater than the Borough average (given proximity to major transport nodes).
- 8.2.2 Over half of the Borough’s working age population travel to work by driving a car or a van (57.7%). This is slightly lower than the South East average (59.9%) and the South East average (59.2%), but higher than the average for England (54.9%). It also outlines that significantly less people than the national average use a bus get to work. The low total probably reflects both relatively poor coverage and frequencies of existing bus routes and the exceptionally high levels of car ownership (see below). The number of people using the train to get to work is however higher at 8.5% but this is likely to be due to the volume of the "London commute" rather than intra-Borough commuting.

Table 8.1: Modes of travel to work

Mode of Travel	Guildford Borough	South East	England
Work mainly from home	10.4%	9.93%	9.19%
Metro, Light Rail or Tram	0.2%	0.23%	3.01%
Train	8.5%	5.63%	4.08%
Bus, Mini Bus or Coach	3.2%	4.35%	7.40%
Motorcycle, Scooter or Moped	0.9%	1.12%	1.09%
Driving a Car or Van	57.7%	59.18%	55.23%

⁶ Guildford and Woking Integrated Transport Study (GWITS)

Mode of Travel	Guildford Borough	South East	England
Passenger in a Car or Van	4.7%	5.65%	6.25%
Taxi or Minicab	0.2%	0.41%	0.52%
Bicycle	2.5%	3.07%	2.83%
On foot	11.2%	9.91%	10.01%
Other	0.5%	0.50%	0.47%

Source: National Statistics

8.2.3 According to the 2001 census, each household in Guildford Borough owned on average 1.45 cars, an increase from 1.27 since the 1991 census. Table 8.2 below illustrates car availability in the Borough.

Table 8.2: Car Availability (2001)

Car Availability	Guildford Borough	South East	England
Households	52,350	3,287,489	20,451,427
Households with no car or van	14.8	19.4	26.8
Households with 1 car or van	40.8	42.6	43.7
Households with 2 car or van	33.5	29.6	23.6
Households with 3 car or van	8	6.3	4.5
Households with 4 or more	2.9	2.1	1.4
Total cars or vans	75,757	4,271,483	22,607,629
Cars or vans per Household	1.45	1.30	1.11

Source: National Statistics

8.2.4 In 2001, 10.9% of households in Guildford Borough owned 3 or more cars, nearly double the average of 5.9% for England. Furthermore, 2.9% of households own 4 or more cars, which is more than double the average for England of 1.4%. The extremely high level of car ownership contributes to congestion in Guildford Town Centre and combined with the low level of public transport use (see above) this represents a significant sustainability challenge to the Borough.

8.2.5 Between 1994 and 2004, 177 adult pedestrians and 78 adult cyclists were Killed or Seriously Injured (KSI). Furthermore, 73 children were KSI between 1994 and 2004. The Borough is seeking to reduce the adult rate of KSI by 40% and the children by 50% by 2010. (Source: SA Scoping Report)

8.2.6 Figure 4 (Appendix 2) shows the location of the existing and proposed transport infrastructure.

8.3 Context Review

8.3.1 Key messages from the context review include:

Key Messages from the Context Review	Evidence Source
Minimise the need to travel and support non-car modes of travel & Locate new development in places, which can be served by public transport.	PPG 13: Transport - ODPM The Provisional Surrey Local Transport Plan Surrey County Council (2005)
Measures for tackling congestion will be implemented throughout Surrey. There will be a particular emphasis in the regional hubs (such as Guildford)	The Provisional Surrey Local Transport Plan Surrey County Council (2005)
Management and maintenance of the Transport Network will make the most effective and efficient use of the existing infrastructure.	The Provisional Surrey Local Transport Plan Surrey County Council (2005)

8.4 Likely future conditions

8.4.1 It is likely that traffic on roads within both the Borough and Town Centre will continue to grow during the plan period, were there an absence of policies designed to curb the use of the car. Without dramatic change in the trends in car use and the use of public transport, it is also likely that traffic congestion in Guildford Borough, including the Town Centre, will increase.

8.5 Relevant SA Objectives

- To reduce road congestion and pollution levels

8.6 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option: Housing

8.6.1 This Preferred Option seeks to locate more, high density housing in the Town Centre and thus appears beneficial to transport. However this particular preferred option gives no indication that car-free housing developments would be given preference. As such, a net increase in housing units would inevitably result in a net increase in the number of cars in the Town Centre, exacerbating congestion. Whilst the overall effect in terms of transport could be negative, this is unlikely to be significant and will be mitigated through detailed requirements of the Vehicle Parking Standards SPD, which provide for lower provision within the Town Centre. No significant effects on the SA objective are likely.

Preferred Option: Offices and other business development

8.6.2 The concentration of new office development in the Town Centre provides a location highly accessible by sustainable modes of transport. The development of employment space and residential dwellings in the Town Centre aims to balance workforce requirements with housing requirements and reduce the need for commuting, particularly by car. In an analogous situation to the Housing preferred option, in reality any increase in employment opportunities is also likely to attract residents from out of the Town Centre, including those from elsewhere in the

Borough and from neighbouring boroughs. At least a proportion of these additional journeys will be by car. Furthermore the delivery of goods to and collections of waste from these new developments will result in the generation of additional traffic.

- 8.6.3 The overall effects on transport are likely to be slightly negative in relation to congestion within the context of the Town Centre, although these are unlikely to be significant. It is noted that the GWITS study is seeking to identify a strategy for both Guildford and Woking which reduces congestion, improves accessibility, the safety and security of the transport system and air quality.

Preferred Option: Shopping

- 8.6.4 This option would deliver additional shopping facilities at the Friary Extension Development sufficient to meet the needs identified by the Retail Needs Assessment to 2011. The new bus station would also be part of this planned expansion. The new facilities should attract increased numbers of people to this shopping area, which is well serviced by public transport, pedestrian and cycle routes. There is no additional car parking facility planned as part of this development.

- 8.6.5 Although no additional car parking is planned, a proportion of the additional visits generated by the new retail facilities will inevitably be by car. Furthermore the delivery of goods to and collections of waste from these new developments may also generate traffic.

- 8.6.6 As for the focus on the office development preferred option, the overall effects on transport are likely to be slightly negative in relation to congestion within the context of the Town Centre, but unlikely to be significant. The effect will be mitigated in part by the Preferred Option - Movement (see below).

Preferred Option: Movement

- 8.6.7 If consistently applied, limiting both public and new private parking provision in the Town Centre would help to reduce the traffic generated by proposed new developments in the Town Centre and will be beneficial in respect of reducing congestion.

- 8.6.8 The planned Park & Ride expansions should also encourage cars to avoid the Town Centre. However there is the potential for congestion at Park & Ride facilities themselves and on the edges of the Town Centre, which should be considered as the revised Park & Ride Strategy is prepared.

- 8.6.9 Improvements to pedestrian and cycle facilities may help to encourage, or as a minimum, maintain levels of usage. Removing the word 'seek' from the sentence could strengthen the delivery of this option (the current wording reads: "*Seek improvements to pedestrian and cyclist access and permeability*").

- 8.6.10 The overall effects on transport from this preferred option are likely to be slightly positive but perhaps not significant since their likely effect may be simply to mitigate anticipated traffic growth associated with future Town Centre growth in

housing, retail and office floor space.

Preferred Option: Tourism

- 8.6.11 Enhancing the Town Centre's role as a quality tourist destination may increase traffic volume entering the Town Centre and its Park & Ride facilities, particularly during the peak tourist season (the summer) and at the weekends. The effects of this are judged to be slightly negative for transport in the Town Centre although not significant.

8.7 Likely significant effects of the Town Centre AAP Preferred Options

Site 2 – Guildford Park Road Car Park

- 8.7.1 The site currently holds 400 car parking spaces, 118 lock up garages and 3 visitor coach spaces. The proposed policy does not indicate a net increase in car parking spaces, rather that the redevelopment should provide an equivalent amount of public parking which would include spaces to compensate for the loss of the existing garages. However the design guide, attached to the policy for this site, identifies the potential opportunity *'for replacement parking for spaces lost elsewhere in the town by development'*.
- 8.7.2 A significant increase in parking spaces in this development could have localised implications for transport. Guildford Park Road is the main vehicular access to and from the site to the Town Centre and is as such considered a constraint on development potential.
- 8.7.3 The effects of this development site policy are judged to be neutral unless the redevelopment significantly increases the number of parking spaces. Effects on the strategic pedestrian and cycle networks are likely to be slightly beneficial due to the proposed inclusion of new dedicated routes along the length of the site.

Site 7 – Land adjoining the Electric Theatre

- 8.7.4 The pedestrian improvements identified in this site proposal include a new footbridge over the River Wey, which would provide an attractive alternative for pedestrians rather than the current crossing points of Friary Bridge and Onslow Bridge, both of which are also used by motorists. This pedestrian crossing would improve accessibility to attractions within the gyratory road system currently isolated from the rest of the Town Centre by the gyratory system. The overall effects of this development proposal are considered neutral in the wider context of transport.

8.8 Proposed mitigation measures

- 8.8.1 None proposed.

8.9 Proposed monitoring

8.9.1 The following contextual indicators could be incorporated in the SA Monitoring Framework:

- Extent and use of cycle and pedestrian networks in the Town Centre
- Modal split of journeys into and out of the Town Centre
- The mode of transport to work in the Town Centre
- Numbers of parking spaces within the Town Centre and Town Centre developments

9 CRIME

9.1 Introduction

9.1.1 This chapter investigates the current and likely future situation in terms of crime in the Town Centre and how the Town Centre AAP might influence crime in future.

9.2 Crime Baseline in Guildford

9.2.1 Guildford as a whole has a low rate of crime, which is typical of the county as a whole. Table 9.1 below illustrates the incidences of crime per 1,000 of the population within the Borough of Guildford compared to the English average.

Table 9.1: Guildford Borough crime figures (2004/5)

Criminal Offences	Guildford Borough	England Average
Violence against the person	13	16.5
Robbery	0	1.4
Theft of a motor vehicle	2	4.5

9.2.2 The Safer Guildford Partnership Community Safety Strategy summarises crime by ward within the Guildford Borough. The Town Centre wards of Friary and St Nicolas and Holy Trinity feature have the highest levels of recorded crime within the Borough. This reflects both the pattern of daytime crime (shop theft, fraud and drunkenness) and at night (assaults, drunkenness and criminal damage).

9.2.3 Levels of disorder are measured through the number of calls made to the police excluding crime reports and other unrelated incidents. The most calls in 2003/04 were received from the Town Centre wards of Friary and St Nicolas (955 calls) and Holy Trinity (602 calls). Friary & St. Nicolas and Holy Trinity ward together account for 39% of all calls relating to disorder in Guildford Borough during the year. In each ward, 40% related to disturbances in a public place and a further 20% relate to incidents of drunkenness. (Source: Draft Safer Guildford Partnership Community Safety Strategy for 2005-08)

9.3 Context Review

9.3.1 The following are the key messages from the context review:

Key Messages from the Context Review	Evidence Source
Ensure good design, including designing out crime	Regional Sustainable Development Framework for the South East (2004)
Ensure that development supports existing communities and contributes to the creation of safe, sustainable and liveable communities	PPS 1: Creating Sustainable Communities (2004)
Six priorities to reduce crime in Guildford, which have common ground with the overall priorities of the County.	2005-2008 Surrey Crime & Disorder Reduction Strategies

9.4 Likely future conditions

9.4.1 Although the levels of recorded crime in the Guildford Borough are low it is likely that the Town Centre wards will continue to have the highest levels of crime. However, the Town Centre is the retail and entertainment centre for the Borough and a certain amount of criminal incidences are, whilst undesirable, to be expected, such as shoplifting and night-time disorder.

9.5 Relevant SA Conditions

- To create and maintain safer and more secure communities

9.6 Likely significant effects of the Town Centre AAP Preferred Options

9.6.1 None identified.

9.7 Proposed mitigation measures

9.7.1 None proposed.

9.8 Proposed monitoring

9.8.1 Several indicators are used by the Borough at present to monitor and identify issues pertinent to creating and maintaining more secure communities and would be appropriate for SA monitoring if these were recorded at the Town Centre level (or using Friary and St Nicolas ward or the Town Centre census output areas as proxies for the Town Centre):

- Number of recorded offences per 1000 people
- Level of domestic burglaries, violent offences against the person and vehicle crimes
- Percentage of residents expressing fear of crime.

10 HOUSING

10.1 Introduction

10.1.1 Guildford has a growing population and in order to meet this population's needs, a mix of new housing including additional affordable housing will need to be provided.

10.2 Housing Baseline in Guildford and the Town Centre

10.2.1 Guildford Borough's population is forecast to increase to 138,000 by 2021. The forecast growth in population is matched by even more rapid growth in households; to 61,800 by 2021, with average household size is forecast to reduce from 2.35 people to 2.18 by 2021. According to the 2001 census data Guildford Town has an average household size of 2.34 people.

10.2.2 The population of Guildford Town Centre is approximately 4,392 people. There are a high proportion (65%) of people aged 44 or younger in the Town Centre. Of the people living in the Town Centre 38% are single, 29% are living in a couple and 17% are cohabiting.

10.2.3 Approximately 50% of people living in the Town Centre live in a flat, maisonette or apartment and only 9% live in a detached house. This reflects the type of housing available in the Town Centre with flats accounting for 72% of all accommodation. Approximately 31% of dwellings in the Town Centre are owner occupied with a mortgage or loan and a further 24% of the population are renting from a private landlord or letting agency.

10.2.4 Approximately 6.8% of households had another household living within it. These "concealed households" cannot afford to enter the housing market.

10.2.5 House prices in the Borough are relatively high, with the average for a flat being £181,070. Table 10.1 below outlines the average house prices for the Town Centre according to the dwelling type.

Table 10.1: Average house prices (Oct-Dec 2005)

Dwelling Type	Average Price	
	Guildford Borough	National
Detached	£481,959	£293,098
Semi-detached	£257,359	£174,744
Terraced	£219,482	£149,905
Flat/Maisonette	£181,070	£173,917

10.3 Context Review

10.3.1 The key messages from the context review are shown in the table below:

Key Messages from the Context Review	Evidence Source
Meet housing requirements, including for affordable housing	PPG 3: Housing (2000); RPG 9: Regional Planning Guidance for the South East; The South East Plan Core Document Draft for Public Consultation (2006)
Promote mixed-use development and urban renaissance	Regional Sustainable Development Framework for the South East
Provide wider housing opportunity and choice and a better mix in the size, type and location of housing than is currently available, and seek to create mixed communities	PPG 3: Housing (2000);
Create more sustainable patterns of development by building in ways which exploit and deliver accessibility by public transport to jobs and services	PPG 3: Housing (2000);
Making a clear commitment to affordable housing by “ring-fencing” capital receipts from disposal of housing assets for affordable housing and regeneration purposes and by this commitment ensure delivery of schemes	Guildford Housing Strategy, 2005

10.4 Likely future conditions

10.4.1 The Surrey Structure Plan 2004 requires Guildford Borough to build 4,750 new homes between 2001 and 2016. These dwellings are to be concentrated within existing urban areas, where services exist already, making Guildford Town Centre a main focus for housing growth in the future. The Government requires local authorities to build at a density of between 30 and 50 homes per hectare, the current residential density in the town as a whole is 52.5 dwellings per hectare.

10.4.2 It seems likely that house prices will continue to rise in the long-term, exacerbating the problem of affordability, although there are likely to be peaks and troughs in the market. Houses prices in Guildford also are likely to remain higher than regional and national averages.

10.5 Relevant SA Objectives

- To provide sufficient housing to enable people to live in a home suitable to their needs and which they can afford

10.6 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option: Housing

10.6.1 The housing option is likely to provide higher-density residential developments, which will be beneficial in delivering housing requirements in the Town Centre. The option (like its Core Strategy preferred option counterpart) seeks an increase in affordable housing provision (from 30% to 35%, according to Core Strategy Indicative Policy CP8) and lowers the threshold at which affordable housing is

required. The Preferred Option should therefore have a significantly beneficial effect on the supply of affordable housing, assuming that the overall delivery of this housing is not reduced because of the increased cost to developers.

- 10.6.2 The preferred option also requires a commitment to quality and this could assist in the delivery of homes which meet Decent Standards and Lifetime Homes Standards, again assuming that the overall flow of Town Centre housing sites is not affected by the increased cost to developers.
- 10.6.3 The preferred option should have a significant beneficial effect in achieving the relevant sustainability objective although delivery of the 35% affordable requirement on larger schemes will require monitoring, as will accordance with the quality and character requirements of policy. Requirements to respect existing character will be particularly challenging given the more efficient use of land envisaged in new developments.

10.7 Likely significant effects of the Town Centre AAP Development Sites

- 10.7.1 Up to 9 of the 11 allocated development sites within the Town Centre AAP have potential for housing, although several had already been identified through the Local Plan. These allocations should have a significant cumulative beneficial effect in achieving the relevant sustainability objective. The sites are reviewed individually below.

Development Site 1: Guildford Station

- 10.7.2 This option will have beneficial impacts on the overall requirement to deliver more housing. It aims to provide a mixed-use development with a housing element. It is likely to provide at least 35% affordable housing (as required by the housing preferred option).
- 10.7.3 Terraced housing surrounds the western margin of the site, care will be needed to ensure that development meets the policy requirement to respect existing character. This may need to be addressed at a property level assessment of impacts.

Development Site 2: Guildford Park Road Car Park

- 10.7.4 Two alternatives have been proposed for this site. The first promotes the inclusion of housing with underground parking. This option is beneficial, as it will contribute to the Councils housing targets. The second option excludes housing and therefore would contribute less to the housing SA objective.

Development Site 4: Civic Hall

- 10.7.5 The redevelopment of this site promotes the inclusion of housing which will be beneficial to the overall need for additional housing in the Town Centre. Development of this site will be constrained by the 'gateway' significance of its location, the need to retain and enhance open space and existing important trees on the site.

Development Site 5: Bedford Road Car Park

10.7.6 This development will contribute to the housing need targets in the town through the redevelopment of warehouses and new high-density units. This site is, however, located within the flood plain (see Water Topic Paper). Building within the flood plain could have financial implications for the developer in providing defences and for residents in insurance costs, as any development would need to meet the stringent requirements of the Environment Agency.

Development Site 6: Mary Road Car Park

10.7.7 As for Development Site 2, housing is one of two options at this site. The housing option would clearly have beneficial impacts on the overall requirement to deliver more housing in the Town Centre. At least 35% affordable housing will be required. Potential constraints include highway infrastructure and flood risk (see Mitigation).

Development Site 10: North Place Day Centre / Bellerby Theatre Site

10.7.8 The policy for this site aims to provide 100% affordable housing, which will be particularly beneficial in meeting overall affordable housing needs targets and the relevant sustainability objective. The policy requires that the design should reintroduce "original urban grain character"; whilst beneficial in respect of character aspects of policy, this may be a disincentive to developers together with the challenging 100% affordable housing target.

Development Site 11: Bright Hill Car Park

10.7.9 This option will have beneficial impacts on the overall requirement to deliver more housing. It should provide at least 35% (as required in the housing preferred option) affordable housing.

10.8 Proposed mitigation measures

10.8.1 The following mitigation measures are proposed:

- Development Site 1: This development proposes higher density development against a backdrop of existing low-density housing. Issues to be highlighted at project level assessment of the effects and addressed through sensitive design will include the need to avoid overshadowing, obstruction of strategic views and the importance of safeguarding existing character;
- Development Site 6: Issues of accessibility and flood risk will need to be addressed a project level assessments.
- Development Site 10: Design requirements should be more explicit in relation to "original urban grain character", to enable developers to develop and cost suitable proposals.

10.9 Proposed monitoring

10.9.1 The following indicators are proposed as part of the SA Monitoring Framework:

- Housing completions
- Completions of affordable housing
- Average price of housing in the Town Centre (compared with the Borough and the regional / national averages)
- Housing completed to a Decent Homes standard
- Housing given planning permission on floodplains (with the agreement of the Environment Agency)
- Number of net new dwellings granted planning permission per year
- Housing completed to a Lifetime Home standard

11 CULTURAL HERITAGE

11.1 Introduction

11.1.1 This chapter aims to assess the effects of Town Centre AAP Preferred Options and Development Sites on its cultural heritage.

11.2 Cultural Heritage Baseline in Guildford Town Centre

11.2.1 The Guildford Borough Local Plan 2003 lists 38 Conservation Areas in the Borough. Of these, six extend into the Town Centre with three covering most of the East and South of the Town Centre Boundary including the Guildford Town Centre Conservation Area itself, which covers the main shopping area centred on the cobbled High Street.

11.2.2 A large number of listed buildings are present within the Guildford Town Centre Conservation Area both along the High Street and along Quarry Street. The Castle is a Scheduled Ancient Monument. Away from the vicinity of the High Street, Quarry Street and the Castle, Listed Buildings are relatively scarce even within Conservation Areas. The distribution of Conservation Areas and Listed Buildings is shown in Figure 3, Appendix 2.

11.3 Context Review

11.3.1 The following are the key messages from the context review:

Key Messages from the Context Review	Evidence Source
Need to assess the impact of new development on the historic environment and give it full weight, alongside other considerations	PPG 15 Planning and the Historic Environment, (1994)
Archaeological remains identified and scheduled as being of national importance should normally be earmarked for preservation	PPG 16 Archaeology and Planning, (1990)
The Agenda seeks to ensure that culture plays its full role in urban and rural renaissance	The Cultural Agenda: SE England Cultural Consortium (2002)
Secure investment in new economic uses for historic buildings	The Cultural Agenda: SE England Cultural Consortium (2002)
“To improve environmental quality and protect and enhance the distinctive character of the Borough”	Objective 7 of Guildford Development Framework – Core Strategy Preferred Options.
“To meet the challenge of making the best use of urban land while protecting the character of the existing environment”	Objective 8 of Guildford Development Framework – Core Strategy Preferred Options.

11.4 Likely future conditions

11.4.1 The Council has the power to increase the number of Conservation Areas in the Borough if it chooses to do so. It has in recent years commenced a programme of conservation area character appraisals, some of which have entailed extending the boundary of some conservation areas.

11.4.2 Currently seven Listed Buildings and a single Scheduled Monument are known to be “at risk” (2005 Guildford Borough Council data). Actions are being taken to seek the repair of these.

11.4.3 The Castle was restored by English Heritage in around 2004/2005.

11.5 Relevant SA Objectives

- To protect, enhance, and make accessible the natural, archaeological and historic environmental and cultural assets of Guildford

11.6 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option- Housing

11.6.1 The Preferred Option will encourage "more high density, high quality housing" in the Town Centre and an increased proportion of affordable housing, from 30% to 35% on qualifying sites (draft Borough wide policy). When combined with the other proposed Core Strategy policies, which maintains a focus on new homes being delivered within existing urban centres. The South East Plan requirement may require an increase in housing requirements, over and above those arising as a result of the existing Local Plan and Surrey Structure Plan, which could potentially have negative impacts on Conservation Areas and Listed Buildings. However such impacts will be mitigated by the requirement to "respect existing character" and also by the Environment Preferred Option (see below). No significant effects are therefore predicted.

Preferred Option - Environment

11.6.2 The Preferred Option (together with Town Centre AAP Preferred Options section "Future Development Framework Guidance") will assist in the protection and enhancement of Conservation Areas and Listed Buildings and ensure new development reflects the existing character of these areas and buildings. The preferred option is underpinned by indicative policies TCG4, TCG5 and TCG6 although the former replaces a policy in the Local Plan. In broad terms there is little change from the existing policy context although the Landscape Character Assessment of the Town Centre provides a new context for assessing whether development proposals are reflective of existing character (e.g. within Conservation Areas). The policy will contribute towards the sustainability objective but perhaps most likely by maintaining the existing character (i.e. "protect") of the Town Centre in relation to new developments rather than enhancement of existing buildings. No significant effects are therefore predicted, in comparison with pre-existing policy.

Preferred Options:

Offices and Other Business Development

Shopping

- 11.6.3 Both Preferred Options envisage the Town Centre as the focus for both new office and retail development in accordance with the Core Strategy. In isolation these options have potential to introduce development inappropriate in character although this is mitigated by preferred option "Environment". No significant effects on the cultural heritage SA objective are therefore identified.

Preferred Option - Tourism

- 11.6.4 The Preferred Option seeks protection and enhancement of existing attractions and facilities and maintains the policy direction of the Local Plan. The Cultural Strategy, including proposed improvements to Guildford Museum, is identified as being linked to this option and may, if implemented in full, deliver significant beneficial effects to Cultural Heritage Resources in the Town Centre and the relevant SA objective.

Preferred Option - Future Development Framework Guidance

- 11.6.5 Together with Preferred Option "Environment", this preferred option will, by requiring new developments to meet the Character Area Analysis guidelines, assist in the protection and enhancement of Conservation Areas and Listed Buildings and ensure new development reflects the existing character of these areas and buildings. The Preferred Option and the Character Area system builds substantially on existing policy and should deliver significant beneficial effects to cultural heritage resources in the Town Centre and the relevant SA objective.

11.7 Likely significant effects of the Town Centre AAP Development Sites

- 11.7.1 Each of the eleven development sites have been reviewed in the context of the existing baseline and likely future conditions described above. Four of the eleven development sites are already allocated in the Local Plan (Sites 1, 3, 5, 8) but none of these lies within a Conservation Area. Of the remaining seven, three of the new allocations (7, 9, 11) lie within Conservation Areas, and might suffer detrimental impacts if their development were inappropriate in respect of the character of these areas (see also Landscape Section of this report). Site 7 (land adjoining The Electric Theatre) is also immediately adjacent to a listed building (the Rodboro Buildings) and Site 9 (Guildford Plaza) is similarly adjacent to a listed building (the Wycliffe Buildings). Through the Town Centre AAP, the Council is seeking to establish clear guidelines, to ensure developments are appropriate to both each site and its context.
- 11.7.2 In all cases, Preferred Options "Environment" and "Future Development Framework Guidance" should, together with relevant Core Strategy Preferred Options, provide sufficient mitigation to ensure that cultural heritage resources, character and in particular local buildings are protected.

11.7.3 As for the Preferred Option Environment (see above), the Development Site guidelines will contribute towards the relevant sustainability objective but perhaps most likely by maintaining the existing character (i.e. "protect") of the Town Centre in relation to new developments rather than enhancement of existing buildings. No significant effects are therefore predicted.

11.8 Proposed mitigation measures

11.8.1 The following measures are proposed:

- Preferred Option "Tourism" - Second bullet to be revised "...and facilities *in accordance with the Cultural Strategy.*"

11.9 Proposed monitoring

11.9.1 The following indicators are proposed as part of the SA Monitoring Framework; data should be collected at the scale of both the Borough and the Town Centre:

- Listed Buildings and Listed Buildings 'at risk'
- Scheduled Monuments and Scheduled Monuments 'at risk'
- Maintenance of Townscape Character of Conservation Areas (in accordance with the Character Area Assessments in the Town Centre AAP, the Town Centre Conservation Area Character Appraisal and Landscape Character Assessment).

12 CLIMATE

12.1 Introduction

12.1.1 Throughout the lifetime of the planet the Earth's climate has varied in response to natural cycles and events. However in recent decades evidence has accumulated to demonstrate that an unprecedented rise in global temperatures has occurred over the last century or so. Scientific opinion is now virtually unanimous in attributing much of this change to anthropomorphic emissions of greenhouse gases, primarily carbon dioxide from combustion for energy generation or transport. These emissions exacerbate the natural greenhouse effect.

12.1.2 Other greenhouse gases now present in the atmosphere include methane from fossil fuels and landfill waste, nitrous oxide from fertilisers and industrial processes, chlorofluorocarbons and hydrochlorofluorocarbons from coolants and sulphur hexafluoride from dielectric fluid. These gases are found in far smaller quantities in the atmosphere than carbon dioxide but have much greater 'global warming potential', or volume-for-volume cause more warming than carbon dioxide.

12.2 Legislation

12.2.1 The main international conventions, EU Directives and UK legislation relating to climate change are as follows:

- **UN Framework Convention on Climate Change (1992)** - sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change
- **Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)** - commits the UK to an 8% cut in emissions of greenhouse gases by 2008-12
- **UK Climate Change Programme (2000)** - domestic goal to cut carbon dioxide emissions by 20% below 1990 levels by 2010
- **The Sixth Environmental Action Programme Environment 2010: Our Future Our Choice (2001)** - ratification of Kyoto Protocol as the first step to the achievement of a 70% cut in greenhouse gas emissions
- **Directive 2003/87/EC of the European Parliament and of the Council** establishing a scheme for greenhouse gas emission allowance trading within the Community (2003)
- **Energy White Paper (2003)** - UK should put itself on a path towards a reduction in carbon dioxide emissions of some 60% by 2050
- **Review of the UK Climate Change Programme (2004)** - currently in consultation; examines the future direction of climate change policy
- **PPS22 Renewable Energy (2004)** - sets a target of 10% proportion of energy generated from renewable sources by 2010
- **Securing the Future: UK Government sustainable development strategy (2005)** - climate change is the "greatest threat" facing the UK and a profound change in energy use is required.

12.3 Emissions of Greenhouse Gases in Guildford

12.3.1 The following baseline is for Guildford Borough as a whole. Data does not exist to enable the emissions of the Town Centre to be quantified separately.

12.3.2 A recent report commissioned by the Department for Environment, Food and Rural Affairs⁷ estimates that 1,093,000 tonnes of carbon dioxide were emitted from the Borough in 2003. Although the report makes clear that these figures should be treated with caution because they are based on many assumptions, they do nevertheless give an indication of the Borough's contribution to global warming.

Table 12.1: Indicative Estimates of Carbon Dioxide Emissions in 2003 (kilo tonnes)

Authority	Estimated Emissions	Population (2001)	Emissions Per Capita
Elmbridge	958	126,000	7.6
Epsom & Ewell	345	68,000	5.1
Guildford	1093	131,000	8.3
Mole Valley	837	81,000	10.4
Reigate & Banstead	1083	126,000	8.6
Runnymede	848	78,000	10.8
Spelthorne	650	89,00	7.3
Surrey Heath	777	81,000	9.6
Tandridge	825	79,000	10.4
Waverley	776	116,000	6.7
Woking	649	90,000	7.2

Source: DEFRA

12.3.3 By comparison, national emissions of greenhouse gases have been estimated and are shown below:

Table 12.2: Estimates of UK Greenhouse Gas Emissions (thousands of tonnes)

1990	1991	1992	1993	1994	1995	1996
786,293	792,500	771,321	753,224	743,717	737,000	764,367
1997	1998	1999	2000	2001	2002	2003
746,435	745,202	713,233	716,689	733,085	711,207	722,328

Source: Office of National Statistics

⁷ Local and Regional CO₂ Emissions Estimates for 2003, DTI (2005)

12.3.4 The UK trend was downwards during the 1990s, although the most recent figures show a slight reversal of this trend. The decrease is attributed to improvements in domestic and industrial energy efficiency and the substitution of coal for gas in the generation of energy.

12.3.5 Table 12.3 confirms that the main source of energy in the South East is from petroleum products, the vast majority of which are consumed by road transport (Source: DTI, Regional and Local Energy Consumption, 2003)

Table 12.3: Energy Consumption (GWh)

	Coal	Manufactured fuels	Petroleum products	Natural gas	Electricity	Renewable & waste
Industry & Commercial	0.1	0.0	12.0	45.8	28.9	-
Domestic	0.4	0.3	5.2	90.2	24.1	-
Road Transport	-	-	129.8	-	-	-
Rail	-	-	0.3	-	-	-
Total	0.4	0.3	147.4	136	53.1	2.6

Source: DTI, 2003

12.3.6 Issues in respect of flood risk, and how this might be exacerbated by global warming, are covered within the Water chapter.

12.4 Context Review

12.4.1 The key messages from the context review are given below:

Key Messages from the Context Review	Evidence Source
Improve the energy efficiency of business	UK Climate Change Programme
Stimulate the provision of more efficient and renewable sources of energy	UK Climate Change Programme; PPS22 Renewable Energy (2004)
Cut emissions of greenhouse gases, especially from the transport sector	UK Climate Change Programme; Securing the Future - UK Government Sustainable Development Strategy (2005)
Promote better domestic energy efficiency	UK Climate Change Programme
Prepare for the expected impacts of unavoidable climate change, developing adaptation responses	UK Climate Change Programme; Securing the Future - UK Government Sustainable Development Strategy (2005)
Continue to encourage the fall in emissions from agriculture and forestry	UK Climate Change Programme
Climate change and energy are an immediate priority for action	Different Paths: UK Framework for Sustainable Development (2005)
Development plan policies should take account of environmental issues such as: The potential impact of the environment on proposed developments by avoiding new development in areas at risk of flooding and sea-level rise, and as far as possible, by accommodating natural hazards and	Planning Policy Statement 1: Delivering Sustainable Development, (2004)

the impacts of climate change	
Effective protection of the environment – by reductions in emissions of greenhouse gases and thereby reducing the potential for the environment to be affected by climate change.	Planning Policy Statement 22: Renewable Energy, (2004)

12.5 Likely future conditions

12.5.1 The global temperature is increasing and will continue to do so unless greenhouse gas emissions are brought under control and reduced. However the global climate reacts slowly and some climate change is now inevitable in response to historic emissions. The impacts of climate change are expected to be warmer, wetter winters, hotter, drier summers. There is likely to be an increase in rainfall, leading to more frequent flooding of rivers. Extreme weather events such as storms or heat waves would be more frequent.

12.5.2 These impacts would likely have a number of indirect effects. These would include changes in the availability and quality of water resources, damage to native habitats and migration or extinction of native plants and animals. Infrastructure and buildings could be damaged more frequently by storms. Unfamiliar diseases might become commonplace in a warmer climate, and patterns of mortality would change with, for instance, fewer premature deaths in winter from cold but probably more deaths from higher temperatures in the summer.

12.5.3 Projections by the Intergovernmental Panel on Climate Change (IPCC) indicate a likely increase in globally averaged surface temperature between 1.4 and 5.8°C over the period 1990 to 2100. This projected rate of warming is very likely to be without precedent during at least the last 10,000 years⁸. The implications of this average rise for the UK, including for Guildford Town Centre, cannot be predicted with accuracy. However changes in weather patterns such as wetter winters and an increased incidence of intense rainfall events mean that floods would likely to be more frequent and increasingly severe. This would need to be addressed by directing new development away from flood plains in the longer term and by defending existing ‘at risk’ areas.

12.5.4 Road transport is likely to continue to be a major contributor to greenhouse gas emissions within Guildford Borough.

12.6 Relevant SA Objectives

- To address the causes of climate change and ensure that the Borough is prepared for its impacts

12.7 Likely significant effects of the Town Centre AAP Preferred Options

12.7.1 Global warming is a problem requiring global solutions but these solutions will still require individuals to assist in their delivery. While reducing carbon dioxide emissions in the Town Centre and the wider Borough may seem trivial set against the scale global emissions, cumulatively such reductions, if replicated elsewhere,

⁸ IPCC Third Assessment Report – Climate Change (2001)

could be significant.

Preferred Option: Energy Efficiency

12.7.2 This preferred option refers to *major* new developments. Indicative Policy TCG1 (Energy Efficiency and Renewables in Guildford Town Centre) provides provisional additional detail in respect of development size thresholds that would trigger consideration of energy design advice and feasibility studies for Combined Heat & Power (CHP). The indicative policy, in combination with Core Strategy Indicative Policy CP25, will not permit relevant development schemes unless they properly assess the feasibility of, and where possible, make provision for the supply of renewable energy and improve energy efficiency in new buildings.

12.7.3 Assuming robust implementation, the Preferred Option and indicative policy will help to reduce energy demand from carbon generating sources and hence reduce carbon emissions. The effect on climate change would be insignificant in itself, however the cumulative effect, taken together with other measures worldwide, is potentially very significant.

12.8 Likely significant effects of the Town Centre AAP Development Sites

Development Site 1: Guildford Station

12.8.1 The design guidelines for the development for this site seeks to investigate the potential to include Combined Heat and Power (CHP) facilities. The inclusion of renewable energy element to a mixed-use development is clearly beneficial. As for the TCAAP Preferred Option "Energy Efficiency" (see above), the effect on climate change would be insignificant in itself, however the cumulative effect, taken together with other measures worldwide, is potentially very significant.

12.9 Proposed mitigation measures

12.9.1 None proposed.

12.10 Proposed monitoring

12.10.1 The following indicators are proposed as part of the SA Monitoring Framework:

- Percentage of energy generated from renewable sources in the Town Centre
- Percentage of new non-residential developments (over 1000m²) generating 10% of their energy from renewable sources
- Percentage of new residential developments generating 10% of their energy from renewable sources.

13 AIR

13.1 Introduction

- 13.1.1 Historically the main cause of poor air quality has been pollution from factories or coal burned for domestic heating. Smoke and sulphur dioxide from these sources resulted in serious public health problems in the major cities, notably in London where episodes of smog were infamous. In general and thanks to regulation and technological changes, this source of pollution is no longer a problem in the UK, however poor air quality remains an issue in some areas.
- 13.1.2 Today traffic forms the principal source of air pollution. Carbon monoxide (CO), oxides of nitrogen (NO_x), volatile organic compounds (VOC) and small particles (PM₁₀) are among the pollutants emitted from vehicle exhausts. These compounds can cause severe cardio-vascular and respiratory harm to people, especially in the long term, and also have adverse effects on the natural and built environment. Whilst some of these pollutants are mobile and affect the wider ambient air quality of an area, the problem is particularly acute along major route corridors and in urban areas with large volumes of congested traffic.

13.2 Legislation

- 13.2.1 The following are the main international conventions, EU Directives and UK legislation on air quality of relevance to the SA / SEA:
- **Council Directive 96/62/EC** on ambient air quality assessment and management (the 'Air Quality Framework Directive')
 - **Council Directive 1999/30/EC** relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air (the first 'Daughter Directive')
 - **Directive 2000/69/EC** of the European Parliament and of the Council relating to limit values for benzene and carbon monoxide in ambient air (the second 'Daughter Directive')
 - **Directive 2002/3/EC** of the European Parliament and of the Council relating to ozone in ambient air (the third 'Daughter Directive')
 - **Directive 2004/107/EC** of the European Parliament and of the Council relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air (the fourth 'Daughter Directive')
 - **Directive 2001/81/EC** of the European Parliament and the Council on national ceilings levels for atmospheric pollutants
 - **Working Together for Clean Air: the Air Quality Strategy for England, Scotland, Wales and Northern Ireland** (January 2000) and Addendum (February 2003)

13.3 Air Quality Baseline in Guildford

- 13.3.1 The Air Quality Regulations 2000 and the Air Quality (Amendment) Regulations 2002 prescribed revised air quality objectives and target dates as outlined in Table 13.1 below.

Table 13.1: Air Quality Objectives and Targets

Pollutant	Objective		Date to be achieved by
Benzene	16.25µg/m ³ (5ppb)	Running annual mean	31December 2003
1,3-Butadiene	2.25µg/m ³ (1ppb)	Running annual mean	31December 2003
Carbon monoxide	11.6mg/m ³ (10ppm)	Running 8-hour mean	31December 2003
Lead	0.5µg/m ³ 0.25µg/m ³	Annual mean	31December 2004 31December 2008
Nitrogen dioxide	200µg/m ³ (105ppb) not to be exceeded more than 18 times per year	1 hour mean	31December 2005
Particles (PM ₁₀)	50µg/m ³ not to be exceeded more than 35 times a year	24 hour mean	31December 2004
Sulphur dioxide	350µg/m ³ (132ppb) not to be exceeded more than 24 times per year	1 hour mean	31December 2004

13.3.2 The Guildford Air Quality Review and Assessment 2000 determined that there was no requirement for Guildford Borough to declare an Air Quality Management Area. This was confirmed in the Updating and Screening Assessment 2003 and verified in the annual Progress Reports 2004 and 2005, and the draft Updating and Screening Assessment 2006.

13.3.3 Monitoring of the two main pollutants of concern identified in Guildford, particulate matter (PM₁₀) and nitrogen dioxide (NO₂) is undertaken at eleven sites. Table 13.2 below lists the monitoring locations. Four of these sites are included in a national survey run by the National Centre for Environmental Technology and reflect specific distances from busy roads.

Table 13.2: Air Quality Monitoring Sites

Site	Location
1 ⁹	Junction of Bridge Street and Walnut Tree Close
2 ²	Junction of Stoke Road and York Road
3 ¹⁰	Joseph's Road
4 ³	Doverfield Road
5	Wisley
6	Chantries
7	Sands
8	Down Lane

⁹ National Survey - kerbside

¹⁰ National Survey - urban background

9	A331 slip road, Ash
10	The Garth, off Aldershot Road, Ash
11	Beckingham Road

Source: Guildford Air Quality Progress Report 2005

13.3.4 Of these sites monitored none exceeded the air quality objectives set out in Table 13.1 above. However, one monitoring site did have an annual concentration of Nitrogen dioxide level reading of 40 µg/m³. Further monitoring indicated that the air pollution level at this site is low. Table 13.3 below outlines this monitoring.

Table 13.3: Monitoring at Bridge Street Guildford

Site	Pollutant	Time	Value	DEFRA Banding	Health Descriptor
Bridge Street	Nitrogen Dioxide	12:00	23 ppb	LOW (1)	Effects are unlikely to be noticed by individuals who know they are sensitive to air pollutants
Bridge Street	Fine Particles	12:00	30 µg/m ³	LOW (2)	

Source: www.guildford.gov.uk

13.4 Context Review

13.4.1 The following are the key messages from the context review:

Key Messages from the Context Review	Evidence Source
EU air quality policy takes the form of an Air Quality Framework Directive and four 'Daughter' Directives which set targets for the concentrations of various pollutants in ambient air	Council Directive 96/62/EC on Ambient Air Quality Assessment and Management
The Core Strategy must consider the impact of potentially polluting development on land use	PPS23 Planning and Pollution Control (2004)
The Core Strategy must comply with statutory environmental quality standards / objectives	PPS23 Planning and Pollution Control (2004)
Targets set for key pollutants: benzene, 1,3-butadiene, carbon monoxide, lead, nitrogen dioxide, sulphur dioxide, small particles (PM ₁₀)	Working Together for Clean Air: the Air Quality Strategy for England, Wales, Scotland and Northern Ireland
To promote a reduction in the use of the car and to encourage alternatives to the car for journeys into the Town Centre	Guildford Borough Air Quality Progress Report 2005

13.5 Likely future conditions

13.5.1 It is likely that levels of air pollution in Guildford Town Centre will remain below the national objectives, particularly if existing initiatives to ease traffic congestion by the promotion of public and alternative means of transport are successful. Park & Ride schemes, bus lanes, cycling and walking strategies and integrated transport all form part of the overall approach.

13.6 Relevant SA Objectives

- To ensure air quality continues to improve and noise / light pollution is

reduced

13.7 Likely significant effects of the Town Centre AAP Preferred Options

13.7.1 None have been identified.

13.8 Proposed mitigation measures

13.8.1 None proposed.

13.9 Proposed monitoring

13.9.1 The following indicators are recommended as part of the SA Monitoring Framework:

- Progress against national statutory air quality objectives
- Number and extent of AQMAs in the Town Centre
- Pollutant levels at existing sites to measure performance against national air quality objectives and AQMA requirements.

14 SOIL

14.1 Introduction

- 14.1.1 Healthy soils are essential to sustainable development. Soils form part of most terrestrial habitats, provide a medium in which plants can grow and are therefore essential to biodiversity. Similarly they are essential in agriculture, with the fertility of the soil having a major bearing on the productivity of the land.
- 14.1.2 The nature of soil contamination depends largely on the nature of the historic activities that have occurred at a specific site. The Town Centre does not have a substantial legacy of contaminated areas, as it was never a major industrial centre.
- 14.1.3 This chapter deals with the likely effects of the Town Centre AAP Options on soils, agriculture and land quality

14.2 Legislation

- 14.2.1 The Environmental Protection Act (1990) defines contaminated land as:

“Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that (a) Significant harm is being caused or there is a significant possibility of such harm being caused; or (b) Pollution of controlled waters is being, or is likely to be, caused”

- 14.2.2 Other relevant legislation includes:

- The Environment Act (1995)
- The Landfill Tax (Contaminated Land) Order 1996, SI 1529
- The Contaminated Land (England) Regulations 2000, SI 227
- The Waste Management Licensing (Amendment) (England) Regulations 2003, SI 595

14.3 Soil Baseline in Guildford

- 14.3.1 The Borough of Guildford covers approximately 104 square miles (269km²). The topography of Guildford is varied, with the North Downs being the boundary between the Weald to the south of the town and the London Basin to the north. The River Wey runs from the south northwards towards the River Thames through a gap in the North Downs. Guildford itself and the Town Centre is therefore situated in a valley at a point where the River Wey cuts through the North Downs and this location has been a significant influence in the town's development.
- 14.3.2 There is no agricultural land within Guildford Town Centre.
- 14.3.3 According to the 2004, Contaminated Land Inspection Strategy review by Guildford Borough Council, approximately 300 sites in the Borough. These key sites that have been the subject of remediation have principally been located in areas where housing has replaced industrial/commercial activities, such as Gomshall Tannery and Queen Elizabeth Barracks. Although it is difficult to give an absolute figure, it is

estimated that since 2001, the following major sites have been subject to remediation:

- Former Petrol Station / Garages to housing 14 (Approx. 8 hectares)
- Barracks / Tanneries to housing (600+ units) 2 (Approx. 25 hectares)
- Scrapyard / builders' yards to housing 10 (Approx. 5 hectares)
- Industrial / commercial to housing 15 (Approx. 33 hectares)
- Industrial to commercial/industrial 20 (Approx. 59 hectares)
- Total: 61 (Approx. 130 hectares)

14.3.4 An unknown proportion of these sites will have been in the Town Centre.

14.4 Context Review

14.4.1 The key messages from the context review are given below:

Key Messages from the Context Review	Evidence Source
Integrate soil and land protection objectives in spatial planning strategies including promoting development on brownfield sites and clean up of contaminated land	EC Communication towards a thematic strategy for soil protection (2004)
Quantify diversity, quality and extent of soils to help develop strategies to eliminate threats to soil and promote sustainable land management	DEFRA Soil Protection Programme (2005)
Draw up a scientific soil catalogue including nature of soil, contaminated areas, high value soils	EC Communication towards a thematic strategy for soil protection (2004)
To provide an improved system for the identification of land that is posing unacceptable risks to health or the environment and for securing remediation where necessary.	Environmental Protection Act (1990)

14.5 Likely future conditions

14.5.1 The need for housing (See Housing Topic Paper) within the Town Centre will drive the remediation and use of any areas of unused contaminated land. Given existing legislation and that there are few existing industrial sites within the Town Centre (or the wider Borough), an increase in the extent of contamination or the number of such sites is highly unlikely.

14.5.2 The extent and quality of agricultural land within the wider Borough is unlikely to change markedly since the focus of development is on existing urban areas. There is no agricultural land within the Town Centre and this will not change.

14.6 Relevant SA Objectives

14.6.1 The following are relevant:

- To make best use of previously developed land and existing buildings
- To reduce land contamination and safeguard soil quality and quantity

14.7 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option - Housing

14.7.1 This preferred option aims to deliver additional dwellings through the identification of redevelopment sites within the Town Centre, which will include contaminated sites. This will be significantly beneficial since it should enable remediation of the soils on these sites. In addition, this re-use of sites and the focus of development on urban areas such as the Town Centre, will help to minimise or avoid land take of greenfield land outside the Town Centre, thus conserving existing agricultural and other resources in the wider Borough.

14.7.2 The preferred option will be beneficial in respect of soils and agricultural land and supports both of the relevant SA objectives. The cumulative benefits of the eleven Town Centre AAP development sites are likely to be significant in respect of the previously developed land objective.

Preferred Option – Offices and Other Business Development

14.7.3 New office development will be directed to the Town Centre and this will ensure that new office developments will be located on accessible, previously developed sites. Most of the comments made in respect of Preferred Option - Housing (see above) are equally applicable here.

14.8 Likely significant effects of the Town Centre AAP - Development Sites

Development Site 6: Mary Road Car Park

14.8.1 Mary Road car park is a known contaminated site, which will require remediation before being re-developed. This will be beneficial in respect of the land contamination objective but will not be significant in its own right.

14.9 Proposed mitigation measures

14.9.1 None proposed.

14.10 Proposed monitoring

14.10.1 The following indicators are proposed as part of the SA Monitoring Framework:

- Number of sites known to be at risk of contamination
- Number of sites that undergo remediation as part of redevelopment within the Town Centre.

15 WATER

15.1 Introduction

15.1.1 This section evaluates the effects of the Town Centre AAP on the existing and future Water baseline of the Town Centre and the River Wey in particular.

15.2 Water Baseline in Guildford Town Centre

15.2.1 Guildford Town Centre sits above a chalk aquifer. There is little evidence of contamination of nearby abstractions, presumably as there are few historical industrial sites.

15.2.2 The town lies on the River Wey, within the Thames catchment, in a valley at a point where the river cuts through the North Downs. The river is listed as "at risk" within the Water framework categories prepared by the Environment Agency.

15.2.3 Flood Zones 2 and 3 extend in a relatively narrow corridor of 100m-250m in total width either side of the Wey and about 500 properties have a 1% chance of flooding every year. This is illustrated in Figure 8 (Appendix 2). In Autumn 2000 severe flooding was experienced in Guildford Town Centre when the River Wey burst its banks flooding Millmead Car Park and other areas, the water reaching heights of about a metre above normal levels (Environment Agency website).

15.3 Context Review

15.3.1 The key messages from the context review are given below:

Key Messages from the Context Review	Evidence Source
Need to improve the chemical quality and ecological status of surface waters	Water Framework Directive 2000/60/EC
Need to improve the chemical quality of groundwater	Water Framework Directive 2000/60/EC
Need to protect water as a resource by promoting its adequate supply / use and make it part of a holistic land planning framework achieving water quality and the preservation of water resources (also minimising the impacts of events such as floods and droughts)	Water Framework Directive 2000/60/EC; Groundwater Regulations (1998); Water Resources Act (1991); Environmental Protection Act (1990)
Need to ensure that flood risk is properly taken into account in the planning of developments, to reduce the risk of flooding to people and the environment and to reduce the risk of damage from flooding	PPG 25 Development and Flood Risk

15.4 Likely future conditions

15.4.1 As described in the Core Strategy report (Section 15), in the long term the incidence of flooding is likely to increase in Guildford Town Centre due to climate change. Water quality in the Wey is however likely to improve as a result of

ongoing improvements to sewage treatment effluents.

15.5 Relevant SA Objectives

15.5.1 The following objectives are relevant:

- To reduce the risk of flooding
- To address the causes of climate change and ensure that the Borough is prepared for its impact

15.6 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option - Housing

15.6.1 Increasing the housing stock within the Town Centre as described by the preferred option will require the provision of additional water resources in a region of relative water scarcity. The policy guidance requires that water efficiency measures be incorporated into new dwellings and this should offset any detrimental impacts of the increased number of houses.

15.6.2 Any housing proposals within Flood Zones 2 & 3 (the flood plain as defined by the Environment Agency) of the Town Centre will potentially be at risk of flooding. This possible negative impact, which is in conflict with the flooding SA objective, will be offset by the Environment and Infrastructure policies described below although additional mitigation may be required. In addition any residential developments, which lead to an increase in the total area of impermeable surface, will exacerbate the risk of flooding at downstream locations and mitigation may be required. It is noted that many of the sites represent proposals to redevelop an existing use(s) already featuring built form / extensive impermeable surfacing.

15.6.3 Town Centre AAP Indicative Policy TGC8 is noted as supplementing Policy G11 of the Local Plan. The focus of G11 was on protecting or improving the particular the setting, amenities, ecological value, architectural and historic interest of the Wey although stated that "...where appropriate, public access is to be provided to and along the River and the Navigations." TGC8 however is much more explicit in respect of increasing public access, leisure and entertainment and enhancing the urban environment. Whilst noting that TGC8 does not replace G11, an increase in emphasis on new riverside developments, which are by definition within the flood plain, could exacerbate existing flood risks whilst also putting the new developments (including any housing) at risk. Given the limited extent of sites where this issue might arise within the plan period, and the fact that planning permission would be subject to consultation with and the agreement of the Environment Agency, this negative effect of the indicative policy is however judged to be not significant.

Preferred Option - Environment

15.6.4 The preferred option requires that development be resisted in the flood plain, "unless there are no suitable alternatives and risks can be mitigated." This option thus offsets in part the policies such as the preferred option for Housing for

possible locations within the flood plain. However give that the Town Centre AAP contains allocated development locations for different proposed uses including housing it is perhaps unlikely that any realistic alternatives exist. It will therefore be important that risks are fully mitigated.

Preferred Option - Offices and Other Business Development

- 15.6.5 Any office or other business proposals within Flood Zones 2 & 3 (the flood plain as defined by the Environment Agency) of the Town Centre will be at risk of flooding. This potential impact will be partially offset by the Environment policy described above and consultation with the Environment Agency during assessment of any planning application. As for Housing (see above), any development which lead to an increase in the total area of impermeable surface will exacerbate the risk of flooding at downstream locations, although it is acknowledged that many of the sites are already developed or hard surfaced.

Preferred Option - Shopping

- 15.6.6 The comments made under "Offices and other Business Development" are also relevant here.

Preferred Option - Infrastructure

- 15.6.7 This preferred option requires that sufficient capacity be provided in respect of water and sewerage to support new development. The option thus supports the Housing policy and indeed any of the development related policies (Offices and Other Business development; Shopping; etc.).

15.7 Likely significant effects of the Town Centre AAP - Development Sites

- 15.7.1 Each of the eleven development sites have been reviewed in the context of the existing baseline and likely future conditions described above. At least four of the eleven development sites were already allocated in the Local Plan (Sites 1, 3, 5, 8). Of the remaining seven sites, all will require the supply of potable water and the provision of sewage infrastructure but this is judged unlikely to cause significant effects either individually or when considered on a cumulative basis.
- 15.7.2 Two "new" sites not identified within the existing Local Plan 2003, 6 and 7, lie within Flood Zone 3 of the mapped flood plain (Source: Environment Agency website). Part of Site 6 (Mary Road Car Park) may be redeveloped for housing whilst Site 7 (Land adjoining the Electric Theatre) will be redeveloped for offices, community or educational use or similar mixed use. Since both lie within Flood Zone 3 (as do previously allocated sites 5 and 8), i.e. in areas at high risk of flooding, a significant potential negative effect is identified, and is in conflict with the SA objective, although this can be mitigated as described below.

15.8 Proposed Mitigation

- 15.8.1 The only significant negative effects of the Town Centre AAP on the water environment identified above arise in respect of flood risk, both in respect of the

preferred options, two development sites (6 and 7, although flood risk potential exists on other allocated sites) and indicative policy TCG8.

- 15.8.2 In theory, both Core Strategy Indicative Policy 24 and Town Centre AAP Preferred Option Environment directs new development or redevelopment towards areas which are not at risk at flooding unless there are no alternatives. However assuming it can be demonstrated that there are no alternatives to any given site, the risk of flooding must be assessed through a risk assessment and mitigated in each case. This may be by the use of enhanced flood defences (perhaps through the use of Planning Benefits, Core Strategy Indicative Policy CP27) and the requirement for on site Sustainable Drainage Systems (SUDS) where this is appropriate.
- 15.8.3 The Council is preparing a Strategic Flood Risk Assessment for the River Wey, which will help to inform the need for any flood defences within the Town Centre, in general and to accord with Core Strategy Indicative Policy 24. In the longer-term, the aspiration would be to seek to move the focus of development away from any areas of the flood plain, which are insufficiently protected. In the short-medium term however the focus should be on minimising the risks of flooding, to given sites by improving flood defences in accordance with the advice of the Environment Agency.
- 15.8.4 In conclusion, the Town Centre AAP Preferred Option: Environment is judged to provide adequate mitigation in respect of the flood risk issue, notably the requirement for risks to life and property to be "satisfactorily mitigated". It would, however, be beneficial to append the phrase "..to the satisfaction of the Environment Agency" to the last bullet of policy.

15.9 Proposed monitoring

- 15.9.1 The following indicators are proposed as part of the SA Monitoring Framework:
- Extent and type of new developments & Re-development in the Flood Plain (Flood Zones 2 and 3)
 - Number of flooding incidents in the Town Centre.

16 BIODIVERSITY

16.1 Introduction

16.1.1 Biodiversity, or more appropriately nature conservation resources, are very limited within Guildford Town Centre although extensive areas of European importance for nature conservation are present in the wider Borough. The Thames Basins Heaths SPA and its buffer zones is the critical issue in respect of biodiversity both within the Borough and within the Town Centre and the comments within the Core Strategy SA report are directly relevant here.

16.2 Biodiversity, Flora and Fauna Baseline in Guildford

16.2.1 There are no statutorily protected sites for nature conservation (SPA, SAC, SSSI) within Guildford Town Centre. However the 2-5km buffer zone of the Thames Basin Heaths SPA extends to cover all of the Town Centre (this zone is shown in Figure 2, Appendix 2). The closest SSSI to the Town Centre is the Wey Valley Meadows SSSI, which lies about 900m south of the Town Centre boundary. Further details in respect of favourable condition of the SSSIs can be found within the Core Strategy report.

16.2.2 There are no Sites of Nature Conservation Importance (SNCI) within the Town Centre. The closest SNCI is the Slyfield Meadow and Riverside Park SNCI about 900m to the north of the Town Centre boundary. SNCI is a non-statutory designation and as such less important than SPA, SAC or SSSI designation, but nevertheless all have local biodiversity value and are protected to some extent from inappropriate development through the planning process.

16.2.3 Despite the absence of designated sites, there are small areas of green space within Town Centre, which will have some limited value for nature conservation within the context of the Town Centre. The River Wey is particular, despite its heavily modified profile and protected banks, still provides a significant green corridor through the Town Centre. It is not known whether protected species, such as bats, which may occur in old buildings, are present within the Town Centre. The natural environmental assets in the Town Centre are shown in Figure 6 (Appendix 2).

16.2.4 The SPA, proposed buffer zones and English Nature's draft Delivery Plan are addressed within the Core Strategy Preferred Option "Environment" and in particular indicative policy CP20.

16.3 Context Review

16.3.1 The following are the key messages from the context review:

Key Messages from the Context Review	Evidence Source
Effect of developments close to the SPAs within Guildford Town Centre must be taken into account by the use of Appropriate Assessment	EU Birds Directive 79/409/EEC

The plan should give priority to maintenance of SPAs

EU Birds Directive 79/409/EEC

16.4 Likely future conditions

16.4.1 No changes in the limited biodiversity value of the Town Centre are likely to occur unless there is a substantial reduction (or expansion) of the extent of existing green space. Existing trends on the SSSIs, SPAs and SACs (see Core Strategy Report) nearest to the Town Centre are likely to continue. Disturbance to the Thames Basin Heaths SPA is likely to remain a significant issue, which may be exacerbated with increasing development pressures upon the Borough including the Town Centre (see below).

16.5 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option - Housing

16.5.1 The Core Strategy preferred options, the indicative policies and Housing Preferred Option of the Town Centre AAP all direct future housing allocations within the Borough towards urban areas, such as the Town Centre. As the Town Centre lies within the 2-5km buffer for the Thames Basin Heaths SPA additional homes could lead to increased disturbance to the SPA. Means of avoiding this is provided for within the Core Strategy (Preferred Option "Environment") although the limited availability of land in the Town Centre is noted. All developments within the 5km buffer including those in the Town Centre will require measures to avoid damage, notably provision of open space and/or improvements to accessibility to existing areas of countryside. The Council is preparing an interim avoidance strategy, which will enable planning permission to be granted for development between 400m and 5km from the SPA. This has been prepared in consultation and agreement with English Nature. This is going before Executive Committee on the 13 July 2006.

Preferred Option - Environment

16.5.2 The preferred option requires the provision of environmental benefits in association with new developments. The improvements may include tree planting and improvements to the "River Wey corridor". There are no specific requirements for improvements in relation to biodiversity or nature conservation as a whole. Even with greater emphasis on this within the option (see Mitigation), the preferred option is unlikely to generate significant biodiversity effects.

16.6 Likely significant effects of the Town Centre AAP Development Sites

16.6.1 No significant effects on biodiversity are identified as a result of the Town Centre AAP allocations. The existing sites are apparently of low value for nature conservation and the outline of the development allocations suggests that there is little available space or opportunity for areas of value for nature conservation, although additional or enhancements to existing open space are envisaged where appropriate.

16.7 Proposed mitigation measures

16.7.1 The following mitigation measures are proposed:

- Continue to work towards ensuring new housing delivery within the Town Centre alongside additional or enhanced accessible areas of open space/countryside to avoid the impacts on the Thames Basin Heaths SPA.
- Preferred Option Environment: Suggest supporting paragraph 6.3.4 is amended to include "appropriate habitat creation" also "requirement for bat surveys in buildings subject to demolition". This matter is also relevant to the Core Strategy Preferred Option "Environment".

16.8 Proposed monitoring

16.8.1 The following indicators are proposed as part of the SA Monitoring Framework and, although particularly relevant at the borough wide scale of the Core Strategy, are directly relevant to the Town Centre AAP and its preferred options in terms of their housing and open space requirements:

- Condition of Sites of Special Scientific Interest (available from English Nature website) - this would also capture the condition of the Thames Basin Heaths SPA
- Use of Thames Basin Heaths SPA for recreation
- The number of residential units consented within the buffer zones to the Thames Basin Heaths SPA and the extent and location of the new area of new open space associated with them.
- Population of key bird species within the SPA, notably nightjar, woodlark and Dartford warbler.

17 LANDSCAPE

17.1 Introduction

17.1.1 This section evaluates the effects of the Town Centre AAP on the existing and future Landscape baseline of the Town Centre. Particular reference is made to open space provision and landscape character. This section should be read in conjunction with the Cultural Heritage chapter.

17.2 Landscape Baseline in Guildford

17.2.1 Guildford's Town Centre has a strong local identity, characterised by a distinctive historic core. Significant buildings include The Castle and Guildhall, interspersed with more contemporary commercial developments.

17.2.2 Open space is typically clustered around the Civic Hall to the north-east of the Town Centre, and to the south, in and around The Castle. The River Wey runs to the west of the centre and is also a significant recreational resource. The majority of open space within the Town Centre is protected.

17.2.3 Character Areas in the Town Centre are shown in Figure 5 (Appendix 2).

17.3 Context Review

17.3.1 The following are the key messages from the context review:

Key Messages from the Context Review	Evidence Source
Requirement to raise awareness; promote training and education; identify and assess landscape character; define landscape quality objectives for the character areas identified	European Landscape Convention (2000)
Need to provide green and open space in support of urban renaissance and rural renewal, social inclusion, community cohesion, health and well-being	PPG17, Planning and Open Space (1991)

17.4 Likely future conditions

17.4.1 In accordance with the existing Local Plan, it is likely that Town Centre redevelopment would enhance the historic character, through environmental and pedestrian improvements. Specifically within the Conservation Areas, existing policy gives consideration to townscape and roofscape issues.

17.4.2 In relation to open space, opportunities already exist within the Local Plan to improve current provision, whilst making improvements to pedestrian access and movement.

17.5 Relevant SA Objectives

17.5.1 The following SA Objective is relevant:

- To protect, enhance, and make accessible the natural, archaeological and historic environments and cultural assets of Guildford

17.6 Likely significant effects of the Town Centre AAP Preferred Options

Preferred Option - Housing

17.6.1 The preferred option will encourage 'more high density, high quality housing' in the Town Centre at a rate at least equal to existing policy. This may limit opportunities to increase open space provision, and depending on the development site, could potentially result in the further loss of existing open space. Conversely, redevelopment of existing hard surfaced sites such as 8 (former Farnham Road Bus Station) or 10 (North Place Day Centre & Bellerby Theatre) could create the opportunity to introduce new open space and/or landscaping.

17.6.2 In relation to character, increased housing stock could be detrimental to the townscape, dependent upon its design and scale, together with visual implications, altering existing views and vistas.

17.6.3 The potential adverse impacts are off-set by the Environmental, Town Centre, and Future Development Framework Guidance Preferred Options described below, which seek to protect and enhance the Town Centre's environment. Specific consideration will be given to providing new public spaces, safeguarding views, and ensuring development reflects local character. No significant effects are therefore predicted.

Preferred Option – Town Centre Facilities

17.6.4 This preferred option aims to improve public services and facilities. In relation to landscape this includes environmental improvements, including provisions of new open space and enhancement of existing, and is underpinned by indicative policies TCG4, TCG5 and TCG6. This option thus off-sets in part policies which may have significant landscape impacts.

Preferred Option - Environment

17.6.5 The preferred option seeks to protect and enhance the Town Centre's high quality historical and physical environment, and provide new public open spaces. The preferred option is underpinned by indicative policies TCG4, TCG5 and TCG6. This option thus off-sets in part those policies which may have significant landscape impacts.

Preferred Options:

Offices and Other Business Developments Shopping

17.6.6 Both preferred options seek to focus new office and retail development within

Guildford Town Centre. As with housing, any new development proposals have the potential to have an adverse impact on townscape character, views, and open space provision.

- 17.6.7 These options maintain the policy direction of the Local Plan 2003, and any potential impacts will be partially off-set by the Environmental and Town Centre Facilities policy as described above and no significant effects are predicted.
- 17.6.8 As with the Housing preferred option, development proposals should give consideration to providing new public spaces, safeguarding views, and ensuring development reflects local character.

Preferred Option – Tourism

- 17.6.9 This preferred option seeks to protect and enhance existing tourist facilities, including the provision of new visitor accommodation. While the development has the potential to have an adverse impact on townscape character, views, and open space provision, this options maintains the policy direction of the Local Plan, and any potential impacts will be partially off-set by the Environmental and Town Centre Facilities policy as described above. No significant effects are predicted.

Preferred Option – Future Development Framework Guidance

- 17.6.10 The preferred option seeks to ensure all new development maintains and enhances the existing character of the Town Centre. This is to be delivered by ensuring development meets the requirements of the Character Area Analysis and Guidelines.
- 17.6.11 The character assessment includes a series of proposed Character Area Improvements. The improvements aim to benefit landscape resources, identifying open space, tree groups, strategic views, landmarks and gateways to be protected and/or enhanced. This goes significantly beyond the existing Local Plan, which does not provide area-based townscape and public realm proposals.

17.7 Likely significant effects of the Town Centre AAP Development Sites

17.7.1 Each of the eleven development sites have been reviewed in the context of the existing baseline. Four of the eleven development sites are already allocated in the Local Plan (sites 1, 3, 5, 8). Of the remaining seven, development has the potential to have detrimental impacts in relation to townscape. In these cases, preferred option 'Environment' and 'Future Development Framework Guidance' provide mitigation to ensure that the historic character is protected and enhanced.

17.7.2 However, a number of development proposals could potentially result in the loss of open space, and/or strategic views, therefore additional mitigation may be required. As currently mapped in Town Centre AAP Preferred Options, three development options may result in the loss of open space and three development options could potentially disrupt important views, if sensitive designs were not secured. Conversely, a number of development sites offer potential for the introduction of new open space.

Guildford Park Road Car Park (in Western Commercial Quarter Character Area)

17.7.3 Planning permission will be given to housing and/or public car-parking. In either scheme, the redevelopment will include new green space. This will positively contribute to open space provision within the Town Centre.

17.7.4 The development site lies within the Western Commercial Quarter character area. The proposed Character Area Improvements map for this area identified strategic views across the development site. Dependent upon building height, development could have a significant impact on existing views and vistas.

Civic Hall (Eastgate Quarter Character Area)

17.7.5 The Preferred Options state that planning permission will be granted for the redevelopment of the site for housing and/or office use, together with a refurbished or new Civic Hall and replacement public car parking. Whilst it is recognised that the indicative development plan accompanying Site 4 is a consultation draft only, as shown the suggested building line encroaches on existing open space, including the loss of important trees (assuming the base plan is correct). A significant impact is therefore possible. This could be mitigated by enhancing existing provision, including planting additional trees.

Mary Road Car Park (Western Commercial Quarter Character Area)

17.7.6 The Preferred Options indicate that planning permission will be granted for the redevelopment of the site for public car parking and/or housing use. As shown on the indicative development plan, development will include an area of new open space, and will therefore have a beneficial effect.

17.7.7 In relation to townscape, the site lies within a Conservation Area and adjacent to the River Wey; any development should protect/enhance local character. The indicative development plan also identifies strategic views towards the

development site, which may be compromised if the decked car-parking/housing intrudes into these views.

Land Adjoining the Electric Theatre (Bridge Street Character Area)

17.7.8 The Preferred Options indicate that planning permission will be granted for mixed-use development. The development site is currently used a hard surfaced public open space and operational parking; development will therefore result in the loss of some open space. This could be mitigated against by the creation of new provision elsewhere.

17.7.9 In relation to townscape, the site lies within the Conservation Area and is adjacent to the River Wey; any development should protect/enhance local character. The proposed Character Area Improvements map for this area also identifies strategic views towards the development site, which could be compromised as a result of any insensitive building height.

Guildford Plaza (Southern Fringe Character Area)

17.7.10 The Preferred Options indicate that planning permission will be granted for the redevelopment of this vacant site for office use. The indicative development plan includes new open space provision, and will therefore have a beneficial effect in respect of this SA objective.

17.7.11 The site is within the Conservation Area, and adjoins listed buildings. Development could therefore have a significant impact on townscape character, although this would be mitigated by adherence to the provisions of the 'Environment' and 'Future Development Framework Guidance' Preferred Options.

North Place Day Centre/Bellerby Theatre Site (Haydon Place and Martyr Road Character Area)

17.7.12 The Preferred Options indicate that planning permission will be granted for the redevelopment of the site for predominantly housing and public car parking. Proposals include an area of green space, and public realm improvements. This will therefore have a beneficial landscape effect.

17.7.13 The development site abuts the Conservation Area boundary. Careful consideration should be given to design and scale of the development, enhancing local character, and ensuring the development makes a positive visual contribution.

Bright Hill Car Park (Eastern Fringe Character Area)

17.7.14 The Preferred Options indicate that planning permission will be granted for housing and public car parking. The development site is currently operational parking with associated landscaping, and any development will therefore not result in the loss of open space provision.

17.8 Likely significant effects of the Town Centre AAP Proposed Character Area Improvements

17.8.1 As discussed under 'Preferred Option – Future Development Framework Guidance', a character assessment has been completed to guide future development. This includes a series of proposed Character Area Improvements, which have been reviewed to identify any apparent discrepancies between available baseline plans (showing open space, tree groups, etc.) and the Character Area Improvements. A small number of discrepancies are noted, which may be due intentional proposals, due to errors in the underlying or drafting oversights. It is acknowledged that the graphics are in draft form only at this stage, for consultation purposes. Whilst no single instance is significant, the cumulative change shows potential for a net loss of open space and tree groups, which may be significant and would warrant mitigation:

Eastgate Quarter

- Potential loss of tree group between multi-storey car park/St. Josephs Church
- Potential loss of open space within Royal Grammar School

Eastern Fringe

- Potential loss of important tree group at eastern end of Sydenham Road

Northern Historic Fringe

- Potential loss of important tree group adjacent to Dolphin House

Southern Wey Corridor Riverfront

- Potential loss of open space west of Debenhams, along banks of River Wey
- Potential loss of Tree Preservation Order group adjacent to Council Offices

Western Commercial Quarter

- Potential loss of Protected Open Space along east banks of River Wey

17.9 Proposed mitigation measures

17.9.1 The following mitigation measures are proposed:

- Ensure the quantity of public open space is maintained. While a number of development proposals provide new open space provision, others potentially reduce provision (having regard to indicative development plans); the current standard should be preserved.
- Ensure strategic views are maintained. A number of development proposals could, if insensitive in size and scale, infringe on identified strategic views. In accordance with the Environment Preferred Option, important views should be safeguarded. Where this is not possible alternative views should be enhanced. Under Preferred Option 'Environment', the third bullet to be

revised; 'safeguarding important views, particularly those strategic views identified in the proposed Character Areas Improvement plans'.

- Review in detail the discrepancies discussed at 17.8.1 and amend Character Area Improvement plans appropriately.

17.10 Proposed monitoring

17.10.1 The following indicators are proposed as part of the SA Monitoring Framework:

- Quality of development in Landscape Character Areas
- Maintenance of distinctiveness within and between Landscape Character Areas
- Maintenance of strategic views within and between Landscape Character Areas
- Quality and extent of open space, including 'public realm' areas, within the Town Centre
- Maintenance of important trees/tree groups/tree preservation orders within the Town Centre.

18 CUMULATIVE EFFECTS

18.1.1 Cumulative effects occur where two or more individually insignificant impacts combine to produce a significant adverse impact (e.g. if dust or noise from two sources combined to exceed a threshold level).

18.1.2 The cumulative effects of the Town Centre AAP Preferred Options are those that result from the interaction of all of the Preferred Options and, consequently, the adverse impacts of some options on a particular Sustainability Appraisal Objective will be outweighed by the benefits of others.

18.1.3 The following three tables illustrate the cumulative effects of the Town Centre AAP Preferred Options against the SA Framework produced as part of the Scoping Report. The SA Framework consists of a set of aspirational Sustainability Appraisal Objectives (SA Objectives) that help define what is meant by sustainable development in Guildford.

18.1.4 The symbols used are as follows:

- Beneficial Impact ✓
- Beneficial Impact (but potential for mitigation) (✓)
- Uncertain impact (probably beneficial) ?
- No Impact ~
- Uncertain impact (probably adverse) ?
- Adverse Impact (but potential for mitigation) (X)
- Adverse Impact X

18.1.5 Beneficial Impact indicates that in combination the Preferred Options will clearly help to achieve the SA Objective. Conversely Adverse Impact suggests that the Preferred Options overall work against the achievement of the SA Objective. Brackets indicate where one or more measures are proposed to mitigate adverse impacts or enhance beneficial impacts.

18.1.6 Some adverse impacts are unavoidable: for instance, population growth is expected in Guildford Town Centre which will place additional demands on water resources and will lead to more household waste being generated. It should be noted that this *does not* necessarily mean that water will be in short supply or that the Preferred Options do not include policy to encourage resource efficiency. Rather it indicates that, taken in isolation, the Preferred Options have certain adverse effects and measures will be required to deal with the problems identified.

Table 18.1: Cumulative Effects

Sustainability Appraisal Objective	Assessment			Comments
	Short	Medium	Long	
1. To provide sufficient housing to enable people to live in a home suitable to their needs and which they can afford	~	✓	✓	Housing Preferred Option likely to have medium / long term benefits
2. To facilitate the improved health and well-being of the population, including enabling people to stay independent and reducing inequalities in health	~	~	~	
3. To reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment	~	(X)	(X)	Certain sites are close to the River Wey.
4. To create and maintain safer and more secure communities	~	~	~	
5. To reduce poverty and social exclusion by improving and encouraging inclusive access to opportunities for education, employment, recreation, health, community services, cultural activities and decision-making for all sectors of the community	~	~	~	
6. To create and sustain vibrant communities	~	~	~	
7. To make the best use of previously developed land and existing buildings, encouraging sustainable construction	~	✓	✓	All of the proposed sites are on previously developed land
8. To ensure air quality continues to improve and noise/light pollution is reduced	~	~	~	
9. To conserve and enhance biodiversity within the plan area	~	~	~	
10. To protect, enhance, and where appropriate make accessible for enjoyment the natural, archaeological and historic environments and cultural assets of Guildford, for the benefit of both residents and visitors	~	✓	✓	Beneficial effects from the Future Development Framework Guidance and Housing Preferred Options
11. To reduce road congestion and pollution levels by encouraging and improving travel choice and reducing the need for travel by car/lorry, including by balancing the needs for employment and housing	~	?	?	Increased number of houses would be likely to lead to more traffic on the roads
12. To reduce land contamination and safeguard soil quality and quantity (including agricultural land)	?	?	?	Likely to be some sites that will undergo remediation during development

13. To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the Borough is prepared for its impacts	~	?	?	Location of some sites not beneficial to longer term adaptation to climate change; however this is offset in part by the Energy Efficiency Preferred Option that should help reduce carbon emissions
14. To reduce the global, social and environmental impact of consumption of resources by using sustainably produced and local products	~	~	~	
15. To reduce waste generation and disposal, and achieve the sustainable management of waste	~	~	~	
16. Maintain and improve the water quality of the region's rivers and groundwater, and to achieve sustainable water resources management	~	~	~	
17. To increase energy efficiency and the proportion of energy generated from renewable sources	~	✓	✓	The Energy Efficiency Preferred Option should help reduce carbon emissions
18. To maintain low rates of unemployment and high levels of economic activity, by improving skills, training and education, and access to these for all	?	?	?	Overall effect of Preferred Options should be beneficial
19. To provide for appropriate commercial development opportunities to meet the needs of the economy	?	?	?	Overall effect of Preferred Options should be beneficial

19 SUMMARY OF PROPOSED MITIGATION

19.1 Proposed mitigation measures

19.1.1 Table 19.1 below lists those mitigation measures proposed in the preceding chapters that have been incorporated by the Council into the final text of the Town Centre Area Action Plan Preferred Options consultation document. The remaining mitigation measures, shown in Table 19.2, will be considered by the Council along with responses to the public consultation on Preferred Options, as the draft document is developed further to produce a 'submission' draft.

Table 19.1: Proposed mitigation accepted by the Council

Option / Site / Policy	Proposed Mitigation	Reason
Environment Preferred Option	Add "to the satisfaction of the Environment Agency" to the last bullet point	Stress the need for flood defences for sites at risk of flooding
	Need to direct development away from flood plain in the long term	Adaptation to climate change
Housing Preferred Option	It might be useful to give further details on how housing developments could 'respect existing character' whether it is a design or materials issue	To provide greater clarity
Movement Preferred Option	Remove "the encouragement of" from fourth bullet point	Change the wording to be more definite
Movement Preferred Option	Remove "the encouragement of" from sixth bullet point	Change the wording to be more definite
Movement Preferred Option	Remove "seek" from last bullet point	Change the wording to be more definite
Movement Preferred Option	Could include reference to safety of non-motorised travellers (e.g. pedestrian priority)	Addresses safety issues
Movement Preferred Option	Additional Park & Ride facilities might have an impact on biodiversity or landscape assets	Need to consider placement of new facilities
Shopping Preferred Option	Would a case-by-case assessment of the need to retain vacant shops be preferable to the current option?	Efficiency in re-use of land and buildings
Offices Preferred Option	Would a case-by-case assessment of the need to retain vacant offices be preferable to the current option?	Efficiency in re-use of land and buildings
Site 1	May be necessary to address issue of overshadowing and obstruction of views at project level assessment of effects	This development proposes high density against a backdrop of existing low-density housing
Site 5	Site in River Wey corridor - does this require special measures for flood risk management?	Adaptation to climate change
	Green space should be designed with emergency storage of flood water in mind	Additional flood management measure

Option / Site / Policy	Proposed Mitigation	Reason
Site 6	Stress the need to consider flood risk in building design	Adaptation to climate change
Site 7	Stress the need to consider flood risk in building design	Adaptation to climate change
	Is the 0.04 hectare area correct?	Possible typo?
Site 8	Site in River Wey corridor - does this require special measures for flood risk management?	Adaptation to climate change
	Green space should be designed with emergency storage of flood water in mind	Additional flood management measure
	Site in area of high archaeological potential - archaeological survey recommended prior to development	Potential for loss of cultural heritage assets
Site 9	Site in River Wey corridor - does this require special measures for flood risk management?	Adaptation to climate change
	Site in area of high archaeological potential - archaeological survey recommended prior to development	Potential for loss of cultural heritage assets
Site 10	Is it possible to clarify the design requirements at this stage, or will this be handled more appropriately in a design brief?	This will offer greater certainty to developers
TCG8	Add "without being otherwise detrimental to other objectives identified in the Local Plan policy" to the end of the sentence	This supplementary policy shifts the emphasis of the management of the River Wey towards access and away from protection of biodiversity

Table 19.2: Additional proposed mitigation measures to be considered by the Council alongside consultation responses

Option / Site / Policy	Proposed Mitigation	Reason
Preferred Option Tourism	Second bullet to be revised "...and facilities in accordance with the Cultural Strategy"	To provide consistency with other aims of the Council
Preferred Option Environment	Suggest supporting paragraph 6.3.4 is amended to include "appropriate habitat creation" also "requirement for bat surveys in buildings subject to demolition"	This would enhance the biodiversity benefits of the option
	Revise third bullet point; safeguarding important views, particularly those strategic views identified in the Proposed Character Areas Improvement plans	To promote the safeguarding of strategic views
General	In accordance with the Environment Preferred Option, important views should be safeguarded; where this is not possible alternative views should be enhanced	To promote the safeguarding of strategic views
General	Ensure the quantity of public open space is maintained	To enhance landscape benefits
General	Review the discrepancies discussed at 17.8.1 and amend Character Area Improvement plans appropriately	To enhance landscape benefits

20 SUMMARY OF PROPOSED MONITORING

20.1 Proposed monitoring

20.1.1 The following indicators are proposed for the SA Monitoring Framework:

Population

- Total population
- Population density per hectare
- Population structure by age
- Population structure by sex
- Population structure by ethnic background
- Population structure by social grade

Human Health

- None proposed

Economy

- Counts of VAT-based enterprises by broad industry group
- VAT registrations and de-registrations

Employment

- Employment by occupation
- Job Seekers Allowance claimants

Transport

- Extent and use of cycle and pedestrian networks in the Town Centre
- Modal split of journeys into and out of the Town Centre
- The mode of transport to work in the Town Centre
- Number of parking spaces within the Town Centre

Crime and Safety

- Total offences and offences per thousand population
- Fear of crime
- Road traffic casualties, including child casualties
- Casualties from other accidents

Housing

- Housing completions
- Completions of affordable housing
- Housing built on Previously Developed Land

- Energy efficiency of new housing
- Percentage of homes built to Lifetime Homes standards

Cultural Heritage

- Listed Buildings and Listed Buildings 'at risk'
- Scheduled Monuments and Scheduled Monuments 'at risk'
- Maintenance of Townscape Character of Conservation Areas (in accordance with the Character Area Assessments)

Climate

- Percentage of energy generated from renewable sources in the Town Centre
- Percentage of new non-residential developments (over 1000m²) generating 10% of their energy from renewable sources
- Percentage of new residential developments generating 10% of their energy from renewable sources
- Percentage of new non-residential developments (over 1000m²) incorporating combined heat and power schemes

Air

- Progress towards national statutory air quality objectives
- Number and extent of Air Quality Management Areas in the Town Centre

Soil

- Number of sites known to be at risk of contamination
- Number of sites that undergo remediation as part of redevelopment

Water

- Extent and type of new development & re-development in the Flood Plain (Flood Zones 2 and 3)
- Number of flooding incidents in the Town Centre

Biodiversity

- Condition of Sites of Special Scientific Interest (available from English Nature website) - this would also capture the condition of the Thames Basin Heaths SPA
- Use of Thames Basin Heaths SPA for recreation
- The number of residential units consented within the buffer zones to the Thames Basin Heaths SPA and the extent and location of the new area of new open space associated with them.
- Population of key bird species within the SPA, notably nightjar, woodlark and Dartford warbler

Landscape

- Quality of development in Landscape Character Areas
- Maintenance of distinctiveness within and between Landscape Character Areas
- Maintenance of strategic views within and between Landscape Character Areas
- Quality of open space, including 'public realm' areas, within the Town Centre
- Quantity of open space within the Town Centre
- Maintenance of important tree groups/tree preservation order within the Town Centre.

APPENDIX 1 – PREFERRED OPTIONS

Housing

- Provide more high density, high quality housing in the Town Centre, respecting existing character

This will be delivered through:

- Identifying redevelopment sites;
- Mainly flatted schemes, an appropriate mix of types and size of dwellings in larger schemes, provision of more housing as a part of mixed use schemes;
- Delivering 35% affordable housing;

Town Centre Facilities

- Retain and improve existing public services and facilities;
- Encourage provision of new services and facilities.

This will be delivered through:

- Support for new or improved facilities, including open space;
- Use of the Council owned sites to assist in the provision of new facilities or the improvement of existing
- Provide uses which contribute to the nighttime economy without encouraging crime and anti social behaviour;
- Redevelopment of redundant or under utilised Council owned and other sites
- Environmental improvements including provisions of new open space and enhancement of existing

Infrastructure

- Deliver the infrastructure requirements arising from each new development.

This will be delivered through:

- Negotiating the infrastructure requirements of new developments as part of the determination of planning applications.

Environment

- Continue to protect and enhance the Town Centre's high quality historical and physical environments and improve those areas of lesser quality;
- Provide new public spaces where the opportunity arises.

This will be delivered by:

- Safeguarding important views;
- Ensuring new development is of a high standard of design and reflects local context, scale and character;
- Making best use of redevelopment opportunities;
- Co-ordination of redevelopment opportunities to maximise benefits, including encouragement of linked Combined Heat and Power (CHP);
- Implementing the Sustainable Checklist process;
- Providing environmental improvements in association with new development;
- Resist development in the flood plain, unless there are no other suitable alternatives and risks can be mitigated.

Offices and Other Business Development

- Focus new office development within Guildford Town Centre; and
- Retain existing offices in office use

This will be delivered through:

- The direction of new offices to development sites.
- Resisting the loss of existing offices

Shopping

- Guildford Town Centre to be the main focus for major development comprising shopping and/or other main town centre uses.

This will be delivered through:

- The provision of more shopping facilities at The Friary Extension Development, to meet the needs for the plan period identified by the Retail Needs Assessment to 2011;
- Reviewing shopping needs after 2011, to consider the need for additional provision up to 2018;
- Revision of primary and secondary shopping frontages, to retain a greater proportion of existing retail units.

Movement

- Limit parking provision within the Town Centre, to encourage use of other more sustainable transport modes
- Seek to locate development generating significant numbers of trips to the Town Centre;

This will be delivered by:

- Permitting Town Centre proposals which provide no more than the maximum car parking standards set out in the Council's Vehicle Parking Standards SPD;
- The encouragement of initiatives to reduce the need for car use and requirement for Green Travel Plans;
- Provision of more Park and Ride facilities serving the Town Centre;
- Encouragement of additional visitor coach-parking facilities;
- Continued improvement of town centre access for buses through implementation of Surrey County Council's bus lanes programme;
- Seek improvements to pedestrian and cyclist access and permeability.

Tourism

- Enhance the Town Centre's role as a quality tourist destination

This will be delivered through:

- Protection or enhancement of the town's existing tourist attractions and facilities
- Provision of new visitor accommodation through the possible identification of a site(s) for hotel development.

Energy efficiency

- Maximise energy efficiency and greater take-up of renewable energy measures in developments.

This will be delivered through:

- Requiring major new developments to undertake Combined Heat and Power (CHP) or other innovative technology feasibility studies which the Council will then appraise;
- Co-ordination of major new developments to maximise all possible benefits;
- Implementing the requirements of the Sustainability Checklist.

APPENDIX 2 - MAPS