

**Sustainability Appraisal and  
Strategic Environmental Assessment  
of the  
West and North West of Crawley  
Joint Area Action Plan**

**Draft**



# CONTENTS

NON TECHNICAL SUMMARY .....	i
1. INTRODUCTION .....	1
2. METHODOLOGY .....	4
3. OBJECTIVES OF THE JOINT AREA ACTION PLAN.....	6
4. OTHER PLANS AND PROGRAMMES .....	8
5. BASELINE DATA .....	14
6. SUSTAINABILITY ISSUES AND FRAMEWORK.....	27
7. DEVELOPMENT OPTIONS .....	33
8. RESULTS OF ANALYSIS .....	36
9. IMPLEMENTATION AND MONITORING .....	51
10. NEXT STEPS .....	52
11. COMMENTING ON THIS REPORT .....	53
APPENDICES.....	53

## NON TECHNICAL SUMMARY

Horsham District Council and Crawley Borough Council are both currently in the process of preparing their Local Development Frameworks (LDF). Both will comprise a series of documents setting out policies and guidance against which development proposals in the respective District and Borough will be considered. Both Councils have already produced some of their Local Development Framework Documents, including their Core Strategies which set out the overarching development strategy for Horsham District and Crawley Borough.

Both Councils Core Strategy documents identify the Area of Study for the Strategic Development Location West and North West of Crawley. The two Councils are now working together to produce a Joint Area Action Plan (JAAP) which will show the preferred options for development within the area of study.

It is a requirement of national and European legislation that the sustainability of all planning documents produced as part of a Local Development Framework is assessed. Horsham District Council and Crawley Borough Council have, therefore, undertaken a Sustainability Appraisal/Strategic Environmental Assessment of the Preferred Options Joint Area Action Plan for West and North West of Crawley.

### **Baseline Data**

To undertake the sustainability appraisal of the Joint Area Action Plan, first baseline data was collected about how the area west and North West of Crawley, is today on social, environmental and economic issues. Baseline data was collected about Rusper Parish in Horsham District and the neighbourhoods of Ifield, Bewbush, Gossops Green and Langley Green within Crawley Borough. The overall findings are summarised below:

#### Economic

Crawley town has a strong economic base, providing a high proportion of employment of the county, compared to the proportion of land. The economy is buoyed by the presence of Gatwick Airport, and is the location of residence of many of its employees. Retail is an important sector of the economy, but the presence of Crawley town centre (and its planned redevelopment) could mean that the provision of some stores may not be viable. Unemployment levels are lower than the national average, with Horsham residents having a larger proportion of residents in management positions.

#### Social

At present Crawley has a comparatively young population placing a particular demand on housing, employment and services, but also a fast growing elderly population. There are also wide differences in deprivation, with the western neighbourhoods of Bewbush and Broadfield being the most deprived. Data shows that the existing community has very high levels of car ownership and most use their cars to reach their work destination, which is often relatively local. Both Crawley and Horsham overall have good levels of education and residents report to be in good health.

#### Environment

Sensitive habitats that have already been identified within the study area, including ancient woodlands and hedgerows and the Mole Valley corridor. Some of these habitats have been designated for their importance to biodiversity at a county or national level. Areas of historic importance have been identified, some of which have been designated as Scheduled Ancient Monuments, Conservation Areas and Listed Buildings. Much of the landscape within the Horsham District area surrounding Crawley is of high quality.

## Sustainability Objectives and Indicators

Using the baseline data, the sustainability issues affecting the area were identified. Taking into consideration the sustainability issues, sustainability objectives were created to assess the contribution the JAAP will make towards sustainable development. The indicators will be used to monitor the contribution the Joint Area Action Plan makes to achieving sustainable development in relation to the sustainability objectives.

Sustainability Objectives	
Sustainability Objective	Sustainability Indicator
1 To ensure that everyone has access to a good quality affordable home that meets their needs	<ul style="list-style-type: none"> <li>Number and proportion of affordable housing completions</li> <li>% of 1,2&amp;3 bedroom houses built as a proportion of the total</li> </ul>
2 To ensure that everyone has access to the health, education, leisure and recreation facilities that they require	<ul style="list-style-type: none"> <li>Number and type of different facilities provided as part of the development</li> <li>Percentage of homes within 30 minutes public transport time of; a GP surgery; a hospital; a primary school and a secondary school</li> </ul>
3 To reduce actual, and fear of, crime and antisocial behaviour	<ul style="list-style-type: none"> <li>Number of crime incident reported in the new development in comparison with other parts of Crawley</li> <li>Post completion residents survey</li> </ul>
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	<ul style="list-style-type: none"> <li>Condition of Landscape Character Areas K2 and L1</li> </ul>
5 To conserve and enhance the biodiversity within the West and North West of Crawley area	<ul style="list-style-type: none"> <li>Change in areas and populations of key species and key habitats including i) change in habitats and species ii) change in areas designated for their intrinsic environmental value</li> </ul>
6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	<ul style="list-style-type: none"> <li>Number of listed or locally important buildings lost or damaged as a result of development</li> <li>Number of archaeological sites / historical landscapes or features lost or damaged as a result of development</li> <li>Number of archaeological sites, historical landscapes or features and historical (listed) buildings enhanced as a result of development</li> </ul>
7 To reduce the risk of flooding	<ul style="list-style-type: none"> <li>Number of properties / other land-uses developed in the current or future floodplain</li> <li>Number of properties/other uses developed against the advice of the Environment Agency</li> </ul>
8 To maintain a high quality environment in terms of water quality	<ul style="list-style-type: none"> <li>Water Quality of River Mole at measuring points at and downstream from the development site</li> </ul>
9 To maintain a high quality environment in terms of air quality	<ul style="list-style-type: none"> <li>Number / Extent of Air Quality Management Zones</li> <li>Complaints regarding air quality re Gatwick Airport</li> <li>Post completion residents survey</li> </ul>
10 To minimise the impact of noise on residents and the wider environment	<ul style="list-style-type: none"> <li>Number of new dwellings permitted within air noise contours</li> <li>Complaints regarding noise re Gatwick Airport</li> <li>Post completion residents survey</li> </ul>

11	To minimise the use of resources, particularly water, energy and materials	<ul style="list-style-type: none"> <li>Number of homes /buildings built to Code for Sustainable Homes/BREEAM standards at each level</li> <li>Incorporation of Sustainable Urban Drainage Systems into the development</li> <li>Number of local recycling centres incorporated within development</li> </ul>
12	To seek to reduce the emission of greenhouse gases, in particularly by encouraging the provision and use of renewable energy	<ul style="list-style-type: none"> <li>Number of homes / developments linked to a combined heat and power system</li> <li>amount of renewable energy incorporated into any development as a % of the schemes predicted energy requirements</li> </ul>
13	To make the most efficient use of land	<ul style="list-style-type: none"> <li>Percentage of dwellings completed at (i) less than 30 dwellings per ha; (ii) between 30 and 50 dwellings per ha; (iii)above 50 dwellings per ha.</li> <li>Percentage of dwellings complying with adopted parking standards</li> </ul>
14	To reduce car journeys and promote alternative methods of transport	<ul style="list-style-type: none"> <li>% of population travelling to work by car, cycle and foot (post completion residents survey)</li> <li>% population within 10 minutes walk of hourly or better bus or train service</li> <li>% population within 400m of hourly or better bus service</li> </ul>
15	To ensure that development maintains, support and promote a diverse employment base to serve the local and sub-regional economy	<ul style="list-style-type: none"> <li>Amount of employment floorspace provided within new development areas and within the Crawley area</li> <li>total housing provision to employment provision ratio</li> </ul>
16	To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre.	<ul style="list-style-type: none"> <li>Amount of new retail floorspace provided within new development areas and within Crawley town centre</li> </ul>

The sustainability objectives were used to assess the sustainability of the different possible options for providing development to the West and North West of Crawley. The results of this assessment then helped inform which options were put forward as the preferred options in the Preferred Options Joint Area Action Plan. The results of this assessment are summarised in the table below.

Joint Area Action Plan Option	Most Sustainable Option	Selected preferred option in JAAP	Further Comments
<b>Option a)</b> Site the neighbourhood west of Bewbush <b>Option b)</b> Site the neighbourhood west of Ifield <b>Option c)</b> Partial (split) development west of Bewbush	a	a	The Bewbush site was found to be more sustainable due to the relationship of Ifield Village Conservation Area to the Ifield site. It was found to be more sustainable to

and Ifield <b>Option d)</b> Have two neighbourhoods, one west of Bewbush and one west of Ifield			provide one neighbourhood as it would need a smaller amount of land and it would be easier to provide transport links, services and facilities to one neighbourhood. Negative impacts on landscape and environment will need mitigation.
<b>Option a)</b> Build a full relief road <b>Option b)</b> Do not build any new roads other than for direct access <b>Option c)</b> Build a link road from A23 to access development west of Ifield <b>Option d)</b> Build a link road from A264 to access development west of Bewbush	b	b	Option b has been found to be the most sustainable. This is mainly due to the landtake that would be associated with a new relief or link road and the resulting impact on the landscape, biodiversity and greenspaces. Option b has been chosen as the preferred option.
<b>Option a)</b> Do not provide strategic employment (neighbourhood provision only) <b>Option b)</b> Provide strategic employment allocation west of Bewbush <b>Option c)</b> Provide strategic employment allocation north of Crawley <b>Option d)</b> Provide strategic employment allocation west of Ifield	a	a	Option a was found to be the most sustainable option as it would have a smaller land take. Not providing strategic employment will not provide a diverse employment base and could have a negative impact on Crawley Town Centre. Negative impacts of non-provision will need to be mitigated against.
<b>Cemetery</b> <b>Option a)</b> Provide a cemetery west of Ifield <b>Option b)</b> Provide a cemetery west of Bewbush <b>Option c)</b> Provide a cemetery north of Crawley <b>Option d)</b> Do not provide a cemetery	d	d	Option d was found to be the most sustainable. It was therefore found that not providing a cemetery is more sustainable than providing it. Option d was chosen as the preferred option. Any negative impacts identified will need mitigation.
<b>Gypsy and Traveller Site</b> <b>Option a)</b> Provide a gypsy and traveller site west of Ifield <b>Option b)</b> Provide a gypsy and traveller site west of Bewbush <b>Option c)</b> Provide a gypsy and traveller site north of Crawley <b>Option d)</b> Do not provide a gypsy and traveller site <b>Option e)</b> Further investigation of the inclusion within the area of study subject to County Wide Needs Assessment.	e	e	Option e was found to be the most sustainable as it would provide the correct number of sites to meet the needs of Gypsies and Travellers. Negative impacts identified on the landscape and environment will need mitigation.
<b>Hospital</b> <b>Option a)</b> Refer to a new hospital			Option d was found to be most sustainable due to the

<p>west of Ifield  <b>Option b)</b> Refer to a new hospital west of Bewbush west  <b>Option c)</b> Refer to a new hospital north of Crawley  <b>Option d)</b> Do not refer to a new hospital</p>	d	b	large land take and resource use a hospital would have, also due to the impact on the landscape and environment. Option b was chosen, negative impacts identified will therefore need mitigation.
<p><b>Park and Ride</b>  <b>Option a)</b> Provide a new park and ride facility west of Ifield  <b>Option b)</b> Provide a new park and ride facility west of Bewbush subject to further consideration.  <b>Option c)</b> Provide a new park and ride facility north of Crawley  <b>Option d)</b> Do not provide a new park and ride facility</p>	d	b	Option d was found to be most sustainable due to the potential impact on flooding due to the large area of hard standing and noise and air quality caused by increased car journeys to the area. Option b was chosen due to an identified need for a park and ride facility. Negative impacts identified will need mitigation.
<p><b>Road Maintenance Depot</b>  <b>Option a)</b> Provide a road maintenance depot west of Ifield  <b>Option b)</b> Provide a road maintenance depot west of Bewbush  <b>Option c)</b> Provide a road maintenance depot north of Crawley  <b>Option d)</b> Do not provide a road maintenance depot</p>	d	d	It has been found to be more sustainable not to provide a road maintenance depot due to the impact it may cause on the landscape and environment and the large resource and land use. Option d has been chosen.
<p><b>Option a)</b> Build a sewage treatment works west of Ifield  <b>Option b)</b> Build a sewage treatment works west of Bewbush  <b>Option c)</b> Build a sewage treatment works north of Crawley  <b>Option d)</b> Do not build a sewage treatment works  <b>Option e)</b> Do not provide a sewage treatment works in the short to medium term, but consider as part of the long term (post 2015)</p>	d	e	Not building a sewage treatment works was found to be the most sustainable due to the possible impact on the environment and landscape. Also the large resource and land use a sewage treatment works would have. Option e has been chosen due to the likelihood that the limit of the current sewage infrastructure capacity will be reached in the future.
<p><b>Option a)</b> Provide strategic open space west of Ifield  <b>Option b)</b> Provide strategic open space west of Bewbush  <b>Option c)</b> Provide strategic open space north of Crawley  <b>Option d)</b> Do not provide strategic open space</p>	a and b	d	It was found to be more sustainable to provide strategic open space either west of Ifield or west of Bewbush as these are the two potential locations for the new neighbourhood, it would therefore provide a recreation facility for the new and existing neighbourhoods. Option d has been chosen, any negative impacts

			identified will need mitigation.
<b>Option a)</b> Provide a University west of Ifield <b>Option b)</b> Provide a University west of Bewbush <b>Option c)</b> Provide a University north of Crawley <b>Option d)</b> Do not provide a university	d	d	Option d was found to be most sustainable as a university is likely to have impacts on the landscape and environment, it was also likely to have a large land and resource use. Option d has been chosen.
<b>Option a)</b> Provide a replacement golf course west of Ifield (if Ifield Golf Course is developed) <b>Option b)</b> Provide a replacement golf course west of Bewbush (if Ifield Golf Course is developed) <b>Option c)</b> Provide a replacement golf course north of Crawley (if Ifield Golf Course is developed) <b>Option d)</b> Do not provide a golf course	d	d	The preferred location for the neighbourhood is west of Bewbush, a replacement golf course is not therefore required.
<b>Option a)</b> Provide full sustainable transport integration alongside each of the transport options, in the form of footpaths, cycle paths, a new train station and bus routes. <b>Option b)</b> Do not provide full sustainable transport integration alongside each of the transport options.	a	a	Option a has been found to be the most sustainable as it could reduce car journeys and therefore have a positive impact on the environment and air quality and help to minimise emissions of greenhouse gases. Option a has been chosen.

## Collective Impacts

Once the preferred options had been chosen the collective impacts of the preferred options were then assessed by setting out the preferred options against the sustainability objectives in a table, the impacts of the options collectively on each of the sustainability objectives were then summarised. The assessment showed that the development and the combined uses would have a major impact on the landscape, historic and cultural environment, and could also affect biodiversity. The increased population would put additional pressure on resources, and would result in more car journeys which would in turn affect noise, air quality, and emissions contributing to climate change. The collective impacts of the preferred option were then summarised, the main findings were that the proposed uses will put additional pressure on existing facilities in the wider area such as the hospital, gypsy and traveller site facilities, cemeteries and sewage treatment facilities.

## Significant Effects

The most significant impacts were then identified having assessed each of the possible options against the sustainability objectives and assessing the collective impacts of the preferred options. The most significant impacts are summarised below:

- The landtake would have a significant effect on the environment and the landscape of the area.

- Increased population and associated car usage would affect the air, noise and environmental quality.
- The provision of housing will meet the needs of local residents, and contribute towards the affordable housing target.
- In the short term, the effects of construction would have an impact on the area, in terms of construction traffic and potential noise.

### **Mitigation**

Possible methods of mitigating these impacts were then identified. Some of the mitigation measures which have been suggested have included:

- Further studies to be carried out in the preparation of an Environmental Impact Assessment
- Remediation of the landfill site before construction commences
- Incorporating design standards
- Landscaping of the area
- A Flood Risk Assessment (FRA)
- Noise mitigation measures
- Providing sustainable transport as an alternative to the private car
- Further reviews into the needs of the new neighbourhood and the wider community in the longer term.

### **Aspects of the development yet to be determined**

Some aspects of the development are yet to be determined and are subject to further work. There may also be other uses which could be identified later on as a part of the masterplanning process. These are:

- The inclusion of a gypsy and traveller site is yet to be determined. This is subject to any need identified in the Countywide Gypsy and Traveller Accommodation Needs Assessment.
- The provision of a park and ride facility is also subject to an identified need. This will be considered by the developer, and will also be affected by whether a new rail station will be provided.
- A sewage treatment works will not be provided with the development to the west of Bewbush. However, provision could occur as part of any additional development in the future, if a need is identified.

# 1. INTRODUCTION

- 1.1. Horsham District Council and Crawley Borough Council are working towards producing a Local Development Framework (LDF) for their respective administrative areas. These Frameworks will contain a range of documents setting out the policies for land-use planning in the respective District or Borough. As part of the preparation of their LDFs, Horsham District Council submitted its Core Strategy and Site Specific Allocations of Land Documents to the Secretary of State in November 2005. Its Core Strategy has been found sound and was formally adopted on 2<sup>nd</sup> February 2007. Crawley Borough Council submitted its Core Strategy to the Secretary of State in May 2006, and the examination hearings took place in February and March 2007. The Inspector's decision is due in the summer of 2007.
- 1.2. To ensure that LDFs contribute to sustainable development, it is a requirement of the Planning and Compulsory Purchase Act 2004 for a Sustainability Appraisal (SA) to be undertaken for each document produced as part of a Local Development Framework. In addition, a Strategic Environmental Assessment (SEA) is also necessary in accordance with European legislation. These two processes are very similar they have therefore been combined. A SA/SEA was undertaken as part of the preparation of both the Horsham District Council and Crawley Borough Council Core Strategies, as well as for the Horsham District Council Site Specific Allocations of Land documents. The results of this sustainability appraisal work are set out in the Horsham District Council "Sustainability Appraisal and Strategic Environmental Assessment; Final Report on the Core Strategy and Site Specific Allocations of Land" and the Crawley Borough Local Development Framework – Sustainability Appraisal and Strategic Environmental Assessment of the Core Strategy. Both these documents were published alongside the Council's respective Core Strategies.
- 1.3. Both Council's have jointly published the West and North West of Crawley Issues and Options document, and the Sustainability Appraisal/Strategic Environment Assessment Scoping report in September 2006. This document leads on from the Scoping Report.
- 1.4. Both the Horsham and Crawley Core Strategies identify Land to the West and North West of Crawley as a location for development. Work has begun on preparing a West and North West of Crawley Joint Area Action Plan (JAAP). This document will provide more detail on the requirements for this development. This JAAP will be subject to a SA/SEA, and this report sets out the approach taken, as well as the preliminary results.
- 1.5. Representations were received following the JAAP Issues and Options consultation document. Some concerns were raised that development may compromise the integrity of settlements, Strategic Gaps, and the countryside; with several respondents being concerned with the general location of the Area of Study. Other respondents were supportive of the strategic location, and keen to draw attention to specific sites within the Area of Study. Elements of support were received for broad development locations to the west of Bewbush and west of Ifield.
- 1.6. Representations specific to the SA/SEA suggested amendments to text, in particular with regard to the baseline data and relevant policies. Concerns focussed on the need to consider the sustainability implications of any increase in traffic outside the study area, the impact on air quality, and the need for compliance with European Air Quality Directives. The absence of a Strategic Flood Risk Assessment was also noted.

- 1.7. As representations largely identified textual changes, these changes have largely been made to the document. Where comments were received these were taken into consideration whilst assessing the sustainability of the options (Appendix A).
- 1.8. Table 1 below shows the statutory requirements of an SA/SEA, and how they will be addressed in this document.

<b>Table 1: REQUIREMENTS OF THE SEA DIRECTIVE 2001/42/EC</b>	<b>WHERE / HOW COVERED</b>
<b>Preparation of an environmental report:</b> <i>taking into account current knowledge and methods of assessment, the content and level of detail of the plan, its stage in the decision making process, and the extent to which certain matters are more appropriately assessed at different levels the information to be given in the report is:</i>	
An outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes.	Contents, Chapter 2, Chapter 3 and Chapter 1
The relevant aspects of the current state of the environment and the likely evolution without implementation of the plan or programme.	Chapter 5
The environmental characteristics of areas likely to be significantly affected.	Chapter 5
Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directive 79/409/EEC and 92/43/EEC.	Chapter 5
Any existing environmental protection objectives established at international, community or national level which are relevant to the programme and the way those objectives and any environmental considerations have been taken into account during its preparation.	Chapter 4
The likely significant effects on the environment, including: short, medium and long term; permanent and temporary; positive and negative; secondary, cumulative and synergistic effects on issues such as: biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and their interrelationships between the above factors.	Chapter 8
The measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse effects on the environment of implementing the plan or programme.	Chapter 8
An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Appendix A, Chapter 2, Chapter 8
A description of measures envisaged concerning monitoring (in accordance with regulation 17).	Chapter 9
A non-technical summary of this information.	Non-technical summary
<b>Consultation with:</b>	
Authorities with environmental responsibility when deciding on the scope and level of detail of the information to be included in the environment report.	Consultation
Authorities with environmental responsibility and the public to be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan and accompanying environmental report before its adoption.	Consultation
Other EU Member States, where the implementation of the plan or	Consultation

programme is likely to have significant effects on the environment of that country.	
<b>Taking the environmental report and the results of the consultations into account in decision making</b>	
<p><b>Provision of information on the decision:</b> When the plan or programme is adopted the public and any countries consulted must be informed and the following made available:</p> <ul style="list-style-type: none"> <li>• The plan or programme as adopted</li> <li>• A statement summarising how environmental considerations have been integrated into the plan or programme in accordance with the requirements of the legislation</li> <li>• The measures decided concerning monitoring</li> </ul>	On adoption

## 2. METHODOLOGY

- 2.1. The Sustainability Appraisal was started at the same time as preparation of the Local Development Framework began. The assessment process has been led by the Environmental Officer based in the Strategic and Community Planning Department at Horsham District Council and Planning Officer from the Forward Planning Section at Crawley Borough Council but has drawn on technical information and expertise from all members of the Departments. The assessment has also drawn on advice and expertise from other Council departments and external organisations.
- 2.2. Plans and Programmes influencing the LDF documentation were identified as part of the Sustainability Appraisal for the Core Strategies of both Horsham District Council and Crawley Borough Council. Those most relevant to the West of Crawley JAAP are listed in this document, these have been updated and other plans and programmes relevant to the West of Crawley JAAP added.
- 2.3. Baseline data for the West of Crawley was collected for environmental, social and economic issues through a process of literature review, collection of information on web sites and through consultation with other organisations.
- 2.4. By examining the requirements of the plans and policies influencing the Local Development Framework, as well as findings of the baseline data, the different sustainability issues affecting the West of Crawley area were identified. Taking into account the sustainability issues, a range of sustainability objectives were developed along with indicators to measure the contribution the West of Crawley JAAP makes to each objective.
- 2.5. There are several alternative ways that the objectives of the West of Crawley JAAP could be met, this led to the development of a range of options. The options identified were based on how achievable they were in planning terms and the requirements of higher level plans and strategies. The options were then subject to an appraisal to identify the most sustainable option.
- 2.6. The methodology used for undertaking the appraisal of the West and North West of Crawley Joint Area Action Plan involved a series of matrices to compare the effects of different options against the West and North West of Crawley sustainability objectives. For clarity purposes, an example of the matrix used and the corresponding key is illustrated below:

Sustainability Objective	Summary of Effects	Option	
		a	b
1			
2			

### Key

Strong positive effect:	☺☺
Positive effect:	☺
No Effect / Not applicable:	☹
Negative effect:	☹
Strong negative effect :	☹☹
Not known	?

- 2.7. Following the comments on the Preferred Options documentation and the interim SA/SEA report, the appraisal will be reviewed and amended as appropriate, before publication as the Final Environmental Report, published with the Submission documentation.

### 3. OBJECTIVES OF THE JOINT AREA ACTION PLAN

- 3.1. As part of the production of an SA/SEA of the West and North West of Crawley Joint Area Action Plan (JAAP), it is helpful to have an understanding of the context in which the JAAP is being prepared, together with the main principles for the development.
- 3.2. Policy W1 of the Crawley Borough Council Core Strategy identifies that a Joint Area Action Plan to the West and North West of Crawley should be prepared for a new neighbourhood of 2,500 homes in the location to the West and North West of Crawley. Policy W2 states that a Strategic Development Location West and North West of Crawley should incorporate appropriate transport infrastructure.
- 3.3. The policies of both Core Strategies have been written to conform with, and reflect each other, and work together to guide development to the West and North West of Crawley.
- 3.4. The principles of the development on the Land to the West and North West of Crawley are set out in full in CP6 of the Horsham District Core Strategy (2007), and section 10 – (Land West and North West of Crawley), of the Crawley Borough Council Core Strategy and are summarised in table 2 below.
- 3.5. This report will not consider how much development is to be situated within the study area, or the broad location as this will be determined in the Preferred Options report. The SA/SEA will assess the sustainability of the options and help inform the Preferred Options report.

<b>Table 2: Principles of the development</b>	
<b>Crawley Borough Council</b>	<b>Horsham District Council</b>
<ul style="list-style-type: none"> <li>• To carry out studies and work to establish how and where the development could take place to the West of Crawley to meet the housing requirements of the Adopted West Sussex Structure Plan and ensure it is delivered in the most sustainable manner and based on appropriate master planning principles;</li> <li>• To ensure development takes place in accordance with the 'neighbourhood' principle;</li> <li>• To ensure that any new development and its associated infrastructure is physically and socially integrated with Crawley;</li> <li>• To minimise the impact on the Horsham Crawley Strategic Gap and the landscape's character;</li> <li>• To secure appropriate transport infrastructure to meet the needs of the</li> </ul>	<ul style="list-style-type: none"> <li>• To integrate the new development with the physical and social infrastructure of Crawley, and with the landscape;</li> <li>• To ensure that the development takes place on a 'neighbourhood' principle with the provision of a mix of uses;</li> <li>• To locate and design the new development in such a way that the sense of separation between Horsham and Crawley is maintained and that the impact of development on this separation, especially on the strategic gap, is minimised;</li> <li>• To take into account the implications of relocating any existing uses and the amenities of existing residents within the area;</li> <li>• To provide sufficient transport infrastructure to meet the needs of the new development whilst maximising the opportunities for sustainable travel;</li> </ul>

<p>new neighbourhood, potentially including a relief road to help minimise impact on the surrounding area and maximising the opportunity for sustainable travel and transport methods;</p> <ul style="list-style-type: none"> <li>• To ensure a mix of housing type, including affordable accommodation which will contribute to meeting Crawley's needs;</li> <li>• To ensure that there are sufficient high quality community facilities and social infrastructure to serve any new development including a new neighbourhood centre, employment provision, education facilities, health care, green space and leisure facilities;</li> <li>• To provide opportunities for new employment provision both within the neighbourhood and to the north west of Crawley in conjunction with links made into Manor Royal/County Oak;</li> <li>• To ensure development protects and where possible, enhances the setting of Ifield Village Conservation Area;</li> <li>• Development should avoid areas of flood risk and aircraft noise contours of 60dBA Leq or more (either as existing or as indicated in relation to the alignment of the potential second runway and 'safeguarded' area);</li> <li>• The development should be based on maximising the opportunities for the use of sustainable construction methods.</li> </ul>	<ul style="list-style-type: none"> <li>• To provide new employment, beyond that required in a neighbourhood centre, including the possibility of an employment allocation within the area to be covered by the Joint Area Action Plan;</li> <li>• The development should seek to minimise any increase in levels of traffic through the existing neighbourhoods of Crawley and where possible, relieve pressure on the existing road network;</li> <li>• The development should provide up to 40 % affordable housing, the tenure of which should be determined through the joint area action plan taking into account the local housing needs of both Crawley Borough and Horsham District;</li> <li>• The Western edge of the new development should provide a firm boundary which can be defended against further development;</li> <li>• The development of any relief or link road would need to be met, in part, on land away from the development area should the need for it (along with its form and location) be determined in the Joint Area Action Plan;</li> <li>• New development should protect and, where possible, enhance the setting of Ifield Village Conservation Area and avoid areas of flood risk and aircraft noise contours of 60dBA Leq or more;</li> <li>• The development should be based on maximising the opportunities for the use of sustainable construction methods.</li> </ul>
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## 4. OTHER PLANS AND PROGRAMMES

- 4.1. The West and North West of Crawley JAAP will be influenced by a wide range of other plans and strategies. Many of these have already been identified as part of Horsham District Council's Sustainability Appraisal and Strategic Environmental Assessment of the Core Strategy and Site Specific Allocations of Land, and Crawley Borough's Local Development Framework – Sustainability Appraisal and Strategic Environmental Assessment of the Core Strategy. The full list of these plans and strategies can be viewed by referring to both documents. The documents which are of the most relevance to the West and North West of Crawley JAAP are summarised in the tables below, together with any additional documents that have been identified since the submission documents were published.

<b>Table 3: International</b>		
<b>Name of Policy / Programme</b>	<b>Broad Aims of Policy / Programme</b>	<b>Requirements in relation to JAAP</b>
EC Directive 2001/42/EC (SEA Directive)	An SEA must be carried out for the West/ North West of Crawley JAAP.	Requires that the environmental effects of certain plans and programmes are assessed, documented and mitigated against where necessary.

<b>Table 4: National</b>		
<b>Name of Policy / Programme</b>	<b>Broad Aims of Policy / Programme</b>	<b>Requirements in relation to JAAP</b>
Planning and Compulsory Purchase Act 2004	Section 39 places a duty on Local Authorities to prepare LDF documents with the objective of contributing to the achievement of sustainable development. Associated regulations require a Sustainability Appraisal of all Development Plan Documents.	Requires local authorities to prepare LDFs with a view to achieving sustainable development.
Government Aviation White Paper, 2003	The Government will not seek to overturn the 1979 planning agreement preventing construction of a second runway at Gatwick before 2019. In case the conditions attached to the construction of a third Heathrow runway cannot be met and since there is a strong case on its own merits for a new wide spaced runway at Gatwick after 2019, land should be safeguarded for this.	There is a need to ensure that the land surrounding Gatwick Airport that could potentially be affected by high levels of air noise is not made available for major new noise sensitive development. The safeguarding requirements of this paper are reflected within the Submission Core Strategy and on the Proposal Map.
Planning Policy Statement (PPS) 1- Delivering Sustainable Development	Sets out the Government's vision for planning and the key policies which should underpin the planning system.	The JAAP should seek to reduce social inequality, ensure provision of homes, jobs, services and facilities, deliver safe, healthy and attractive places to live and support promotion of health & well-being.
Draft Planning Policy Statement: Planning and Climate Change. Supplement to Planning Policy Statement 1	Sets out the Government's responses to climate change and the Stern Review.	The JAAP should help shape new communities which have lower carbon emissions and are resilient to climate change.

<b>Table 4: National</b>		
<b>Name of Policy / Programme</b>	<b>Broad Aims of Policy / Programme</b>	<b>Requirements in relation to JAAP</b>
Planning Policy Statement 3 – Housing (PPS3)	Sets out the Government's approach to the provision of housing, including the location of housing development and its density.	Requires that high quality housing development be delivered through planned timescales, based on need and via the plan, monitor and manage principles.
PPG4 – Industrial, commercial development and small firms	Sets out the approach to encouraging economic growth.	Growth should be managed to encourage industrial and commercial development in Crawley and the wider area.
PPS 9 - Biodiversity and Geological Conservation	Sets out the Government's approach to biodiversity and geology in the planning system.	The JAAP will need to consider any protected sites or species, as well as identifying areas for creation or restoration of biodiversity.
PPS10- Planning for Sustainable Waste Management	Sets out the Government's approach to sustainable waste management and the reduction of waste.	The JAAP will need to consider the most sustainable approach to waste and provide necessary facilities.
PPS 12 - Local Development Frameworks	Sets out guidance on how to prepare development plan documents.	Contains guidance and advice on preparing AAPs, undertaking consultation and Sustainability Appraisals.
PPG 13 – Transport	Sets out the Government's approach to the provision of transport in relation to development.	Urban growth should be managed to maximise use of public transport, and ensure facilities are accessible by walking and cycling, and reduce the reliance on the car, as well as considering disabled users.
PPG 15 – Planning and the historic environment	Sets out the Government's approach to the historic built environment in the planning system.	The JAAP will need to consider the protection of listed and historic buildings and conservation areas.
PPG 16 – Archaeology and planning	Sets out the Government's approach to archaeology in the planning system.	The JAAP will need to consider the protection and enhancement of archaeological sites and monuments.
PPG 17 -Planning for Open Space, Sport and Recreation	Sets out the need for Local Authorities to ensure that open space, sport and recreation facilities are provided.	Open space, sport and recreation facilities should be provided according to an assessment of local needs.
PPG24- Planning and Noise	Sets out the Government's approach to noise-sensitive developments and activities which generate noise	The JAAP will need to consider noise levels in the study area, particularly to the north in the area close to Gatwick Airport.
PPS25 - Development and Flood Risk	Sets out the Government's approach relating to the consideration of flooding in relation to planning.	Strategic Flood Risk Assessments should be undertaken at regional and local level. Increased emphasis to be put on the impact of climate change on flooding. Development should incorporate measures to reduce the likelihood of flooding on or off site.
A Practice Guide Companion to PPS25 'Living Draft'	Provides guidance on the implementation of the policy set out in PPS25	The JAAP should follow guidance in the management of flood risk.
Code for Sustainable Homes	Provides guidance on the design and construction of sustainable homes	The JAAP will aim to deliver homes with a Code for Sustainable Homes standard of a minimum of 3 to 4.
Building a Greener Future: Towards Carbon	Provides an introduction to measures aiming to provide zero	The JAAP should follow these principles in the aim of reducing the

<b>Table 4: National</b>		
<b>Name of Policy / Programme</b>	<b>Broad Aims of Policy / Programme</b>	<b>Requirements in relation to JAAP</b>
Zero Development	carbon homes within a decade.	carbon footprint of the new development.

<b>Table 5: Regional</b>		
<b>Name of Policy / Programme</b>	<b>Broad Aims of Policy / Programme</b>	<b>Requirements in relation to JAAP</b>
"A Clear Vision for the South East" The South East Plan Core Document, March 2006.	Document setting out the framework for development in the South East up to 2026.	Sets out potential growth areas and total housing numbers for south east, including the provision for the Gatwick sub-area in which the West and North West of Crawley strategic location falls.
The High Weald AONB Management Plan 2004 – a 20 year strategy	The document identifies the important features of the AONB and sets out guidance and objectives on the ways in which these features can be protected, restored and enhanced. It does not contain land use policies but deals with good management practice of the area.	The document has been adopted as Supplementary Planning Guidance. The land and countryside management issues in the document should be considered when formulating new policies and proposals which affect the AONB.
RPG9	The document sets out a regional framework for the preparation of development plans.	This document should be considered when preparing the JAAP in terms of conformity with regional guidance.
Regional Economic Strategy	Sets out the regional vision for sustainable prosperity and economic success.	The JAAP will need to deliver development which meets needs and contributes towards the goals set out in the strategy.

<b>Table 6: County</b>		
<b>Name of Policy / Programme</b>	<b>Broad Aims of Policy / Programme</b>	<b>Requirements in relation to JAAP</b>
The Adopted West Sussex Structure Plan 2001-2016	Sets out the vision for West Sussex to 2016 in terms of land-use policy.	Contains a range of policies relating to land use planning, including LOC1, which identifies land to the West of Crawley as an area for development.
Sussex Biodiversity Action Plan	Identifies key habitats and species and sets out actions to enhance the biodiversity of these areas.	Contains actions for hedgerows, woodland, in riverine and grassland habitats which occur in the West and North West of Crawley area.
The West Sussex Transport Plan 2006-2016	Has the following objectives: 1) Reduce congestion and pollution; 2) Improve road and personal safety; 3) Improve accessibility for our residents to key services; and 4) Improve overall quality of life in West Sussex.	The JAAP should take these issues into account.
West Sussex County Council Minerals and Waste Core Strategy Development Plan Document	Sets out the vision and strategy for minerals and waste planning up to 2021.	The JAAP should accord with the principles set out in this document when providing for the increased waste as a result of the development.
West Sussex Strategic Waste Site Allocations Development Plan Document	Deals with the identification of large sites for new built waste management facilities of over 1 hectare, and sites for non-inert landfill.	Allocations of land should result from discussions between WSCC, HDC and CBC.

<b>Table 7: District / Borough</b>		
<b>Name of Policy / Programme</b>	<b>Broad Aims of Policy / Programme</b>	<b>Requirements in relation to JAAP</b>
Horsham District Council Local Development Framework Core Strategy (2007)	Sets out the spatial vision for the District with particular reference to land-use planning.	CP1, 2 and 3 set out principles for sustainable development in the District. CP6 identifies Land West of Crawley for Development with policies CP10 and 12 setting out the need for employment and affordable housing provision.
Crawley Borough Local Development Framework Submission Core Strategy	Sets out an overall spatial vision for the future development of the town to 2018 and beyond. It focuses on guiding and controlling development within the Borough.	Policy W1 sets out the principles for West and Northwest of Crawley. Policy W2 sets out the requirement for appropriate transport infrastructure to support development. Policies S1 and S2 seek sustainable locations and development.
Horsham District Council SA/SEA of the Core Strategy and Site Specific Allocations of Land	An assessment of the effects of the Core Strategy and Site Specific Allocations of Land documents on sustainability.	Provides recommendations for policy development and mitigation to better meet sustainability objectives some of which should be incorporated into the JAAP.
Crawley Borough Local Development Framework –	An assessment of the effects of the Crawley Borough Council	Provides recommendations for policy development and mitigation,

Sustainability Appraisal & Strategic Environmental Assessment of the Core Strategy	Core Strategy on sustainability.	to better meet sustainability objectives some of which should be incorporated into the JAAP
Crawley Borough Council Local Plan, 2000	Sets out the spatial vision for the borough up to 2006, and how the West Sussex Structure Plan principles are applied in Crawley.	The JAAP will need to accord with the principles of the Local Plan whilst it remains the adopted development plan document.
Horsham District Council Community Strategy	Sets out the shared visions for the future of the District created through partnership with a number of organisations.	Visions under key strategy areas of Community Safety, Health, Leisure and Cultural Activities, Lifelong Learning, Local Housing, Facilities and Services for Younger / Older People, Transport, Local Business and the Environment need to be incorporated into JAAP.
Crawley Borough Council Community Strategy - 'A Vision for Crawley' 2003	The Community Strategy is a shared vision for the town created through partnership.	Identifies 6 key areas (Affordable Housing, Community Safety Local Economy, Health & Social Care Education and Lifelong Learning Local Environment) that need to be addressed in the JAAP.
Horsham District Landscape Character Assessment 2003	Sets out the different areas of landscape character across the District, together with their condition and sensitivity.	Development areas mainly fall in K1 "Upper Mole Farmlands" and I2 "Warnham and Ruser Wooded Ridge" Features of these areas need to be conserved and enhanced.
Urban Rural Fringe Study for Crawley July 2006	Provides an assessment of landscape areas West and North West of Crawley with and sets out capacity for development in landscape terms. Makes suggestions as to how development could be incorporated into the landscape.	When determining development location and design the JAAP will take into account the findings of this work, which suggests locations for the development of housing.
Horsham District Council Housing Needs Survey	Survey seeks to identify the number of people in need of an affordable home in Horsham.	In excess of 900 new affordable homes are required each year.
Crawley Borough Council Housing Needs Assessment, 2004	Survey seeks to identify the number of people in need of an affordable home in Crawley	926 new affordable homes are required each year.
Crawley Borough Council Housing Strategy (2004-2007)	This emphasises the need to provide a good supply of quality homes to meet needs in the town. The provision of affordable housing including that for key workers is a priority issue. Also to provide for the needs of vulnerable people including the homeless.	New sites, including those in the Action Areas to be allocated for housing development to meet growth needs of the town. These sites to include a mix of house types and tenures and a proportion of affordable housing.
Appropriate Assessment of Horsham District Council's Core Strategy	Looks at the implications of land use plans for European Sites. Assesses the impacts of the plan against the conservation objectives of the European Site to determine if the plan will have an adverse affect on the site.	The JAAP will need to take the findings of the Appropriate Assessment into account when deciding on the options for location and design of the development.
Horsham District Council Final Supplementary	Sets out details of services and facilities that will be required	This will need to be taken into account in the masterplanning

Planning Document on Planning Obligations	when land is proposed for development and where planning obligations would be sought.	process.
Strategic Flood Risk Assessment	Assessing the risk of flooding in Crawley, Horsham and Reigate and Banstead, and how increased development will affect flood patterns.	The JAAP should have regard to the results of the study, and put into place mitigation of adverse effects.
URS JAAP Study	Looks at the principles of development on the landfill site, the neighbourhood principle, employment, transport and development viability.	The JAAP will be informed by the outcome of this work in preparing the Preferred Options.
Draft Crawley Borough Council Central Langley Green SPD, 2006	Provides guidance on the expected uses, scale and form of development and transport and access issues in relation to the Central Langley Green area.	The JAAP should have regard to the principles of development in the neighbouring area of Langley Green.
Draft Crawley Borough Council Bewbush SPD	Provides guidance on the expected uses, scale and form of development and transport and access issues in relation to the Central Bewbush area.	The JAAP should have regard to the principles of development in the neighbouring area of Bewbush.
Crawley Supply/Demand Analysis, 2004	Provides information on the supply and demand of housing within Crawley, and on planned movement of households.	The JAAP should have regard to the supply and demand of housing within Crawley.
Crawley Borough Council Affordable Housing Viability Study, 2006	Discusses the likely impacts on changes to the affordable housing target.	The JAAP should take into account the principles of affordable housing provision.
Development Plan Documents of neighbouring local authorities	Principle of development in the Mole Valley, Tandridge and Reigate and Banstead areas.	The JAAP should have regard to the principles and development proposals of neighbouring authorities.
Mole Valley District Council Local Plan	Sets out the planning strategy for the Mole Valley District.	Due to the proximity of Mole Valley District to the development area boundary the JAAP should have regard to the Local Plan.
Feasibility Study for Development Options at Crawley	Sets out the issues and implications of development around Crawley.	Identifies the land to the west of Bewbush as a developable site.

<b>Table 8: Local</b>		
<b>Name of Policy / Programme</b>	<b>Broad Aims of Policy / Programme</b>	<b>Requirements in relation to JAAP</b>
Ifield Village Conservation Area Statement – September 1999	To promote environmental enhancements consistent with the character of the village. Provides guidance for residents to ensure any proposals for development are consistent with the overall objectives of the Conservation Area.	The JAAP will need to ensure that the character of Ifield Conservation Area is conserved and enhanced.

## 5. BASELINE DATA

- 5.1. Before any appraisal of how the West and North West of Crawley Joint Area Action Plan will contribute to sustainable development, it is important to have an understanding of the current characteristics of the area allocated for development. This information or 'baseline data' helps to provide a basis for identifying the key sustainability issues for the land West and North West of Crawley, as well as providing a measure against which the predicted effects of the JAAP will be tested.
- 5.2. The Sustainability Appraisal and Strategic Environmental Assessment of the Horsham and Crawley Core Strategies sets out baseline data at a District and Borough wide level. Whilst this data is relevant to the West and North West of Crawley allocation in terms of setting the overall context for the area, more detailed local information is necessary to help identify the specific sustainability issues for the West and North West of Crawley development.
- 5.3. A summary of the key findings of the baseline data is outlined below. The information has been grouped under headings to include topics specifically identified in the SEA regulations.

### General Characteristics

- 5.4. The land proposed for the Strategic Development to the West and North West of Crawley is situated within Horsham District, in the Parish of Rusper, and within Crawley Borough to the north of the Langley Green neighbourhood. The land within Horsham District adjoins the Crawley neighbourhoods of Ifield and Bewbush. The Crawley neighbourhood of Gossops Green makes up the majority of the Western neighbourhoods within the Borough.

### Population

- 5.5. The population of Ifield is 8,414 with a working age population (aged 16-64) of 5,083 which equates to 60% of the total population. Bewbush has a population of 9,079 with a working age population of 5,872 which equates to 69% of the total population. Gossops Green has a population of 5,012 with a working age population of 3,087 or 62%. Langley Green has a population of 7,284 with a working age population of 4,430 or 61%. Rusper Parish has a population of 1,389 with a working age population of 62% of the total (2001 Census).

### Housing

- 5.6. Within Ifield there are 3,452 households, 3,173 in Bewbush, 2,093 Gossops Green, 2,878 Langley Green and 579 in Rusper Parish. Of these most are owner occupied: 74% in Rusper Parish (5% Social Housing), 66% in Ifield, (Social Housing: 29%) and 57% in Bewbush, (Social Housing: 36%) 66% in Langley Green (Social housing 28%) 74% in Gossops Green (Social Housing 21%). This compares with an average level of owner occupation of 68% in Crawley Borough and 79% in Horsham District (2001 Census).
- 5.7. Household and population density also varies in the different neighbourhoods; Bewbush has a density of 23.5 households per hectare with an average of 2.9 people in each household. Ifield has a density of 15.3 households per hectare and an average of 2.4 people per household. Gossops Green has a density of 20.9 households per hectare and an average of 2.4 people per household. Langley

Green has a density of 2.5 households per hectare and an average of 2.5 people in each household. Figures are not currently available for Rusper Parish, however the population is dispersed across a wide rural area.

- 5.8. The cost of housing in Horsham District is high; average house prices for Horsham as a whole between October and December 2006 were £291,485, but was lower in Rusper Parish at £258,903. Average house prices in Ifield and Bewbush for the same period was lower than both Horsham and the national average prices as is illustrated by the table below.

<b>Table 9: Average property prices</b>					
	<b>Average price</b>	<b>Detached</b>	<b>Semi-Detached</b>	<b>Terraced</b>	<b>Flat</b>
<b>National</b>	£173,717	£263,070	£164,640	£134,772	£162,418
<b>Crawley (numbers in parenthesis)</b>	£205,062 (556)	£324,803 (92)	£223,838 (112)	£179,016 (244)	£142,436 (108)
<b>Ifield (numbers in parenthesis)</b>	£205,050 (70)	£407,481 (8)	£277,627 (11)	£171,236 (38)	£117,911 (13)
<b>Bewbush (numbers in parenthesis)</b>	£162,938 (9)	*	*	£162,938 (9)	*
<b>Gossops Green (numbers in parenthesis)</b>	£180,013 (70)	£262,750 (6)	£216,399 (16)	£170,685 (32)	£131,257 (16)
<b>Langley Green (numbers in parenthesis)</b>	£191,466 (48)	*	£209,727 (22)	£183,733 (21)	£143,600 (5)
<b>Rusper (numbers in parenthesis)</b>	£258,903 (68)	£387,928 (14)	£261,172 (25)	£216,457 (20)	£146,222 (9)

Source: Land Registry, December 2006

\* No sales in quarter

- 5.9. Both Crawley Borough and Horsham District have a high identified need for affordable housing. Within Horsham District the Housing Needs Assessment identified a need for 937 new affordable units per year over the period of 2003 to 2011. The Crawley Housing Needs assessment identified a need for 926 affordable units per annum over the period of 2004-2011. The results of the Crawley Borough Housing Needs Assessment 2004 also recommended 40% of all housing development be affordable with 70% social rented and 30% shared ownership, shared equity and discount market rented.

### **Social Inclusiveness and Deprivation**

- 5.10. Horsham District has very low levels of deprivation and social exclusion; nationwide only 12 authorities are less deprived (ranking 342 out of 354 where 1 is the most deprived) Crawley Borough ranks 215 out of 354 (English Indices of Deprivation 2004). These figures only identify an average of the whole District or Borough, and some areas and neighbourhoods are more deprived than others.

## Community Safety

- 5.11. Within Crawley Borough as a whole, notifiable crimes have fallen in recent years. Offences dropped between the first and the last quarter of 2005/06 with offences per 1000 population falling from 37.3 to 34.0. In 2005/06 most crimes were for vehicle and other theft, criminal damage and violence against the person. Within the Horsham area in the same period crime also fell from 13.3 to 13.1 crimes per 1000 population.
- 5.12. Crime figures for 2001 can be broken down by neighbourhood. There were 1,847 recorded crimes in the western neighbourhoods of Crawley in 2000/2001. This represents 21% of the total number of recorded crimes in Crawley. The number of recorded crimes in Gossops Green, Ifield and Langley Green are all below this average; Bewbush was slightly above the average with 668 recorded crimes.

## Health

- 5.13. The English Indices of Deprivation (2004) show that approximately 70% of residents in Crawley as a whole and each of the western neighbourhoods reported to be in good health and less than 10% of residents reported not to be in good health.

	Reported in good Health (%)	Reported in fairly good health (%)	Reported not in good health (%)
Crawley	71	21	7
Bewbush	73	21	6
Ifield	68	23	9
Gossops Green	68	24	7
Langley Green	67	24	8
Horsham	74	20	6

Source: The English Indices of Deprivation (2004)

- 5.14. Access to health care is more of an issue. At the current time there are 17 GP surgeries including 5 branch surgeries in Crawley, and the nearest main hospital is at Redhill, with others at East Grinstead, Haywards Heath, Worthing and Brighton, all of which can be difficult to access by public transport, though a shuttle bus is run from Horsham and Crawley Hospitals.

## Education

- 5.15. Overall, levels of education in Horsham and Crawley are good. Residents of Horsham District have particularly good levels of education, higher levels of qualifications than the national average, and fewer people than average with no qualifications. On a more local neighbourhood level, residents of Bewbush and Ifield have a higher level of level 1 and 2 qualifications than the national average, but significantly lower levels of people have higher level qualifications. Langley Green, Gossops Green and Ifield have a higher level 4 and 5 than Bewbush, however this is still below the average for Crawley. The breakdown of these figures is set out in more detail in the table below (source – National Statistics 2001).

<b>April 2001 Data Age 16-74</b>	<b>Bewbush</b>	<b>Ifield</b>	<b>Gossops Green</b>	<b>Langley Green</b>	<b>Crawley</b>	<b>Horsham</b>	<b>South East</b>	<b>England</b>
No qualifications	26%	30%	28%	35%	25%	19%	24%	29%
Level 1 qualifications <sup>1</sup>	27%	21%	22%	23%	22%	17%	17%	17%
Level 2 qualifications <sup>2</sup>	25%	22%	22%	18%	23%	25%	21%	19%
Level 3 qualifications <sup>3</sup>	7%	8%	7%	7%	8%	10%	9%	8%
Level 4 / 5 qualifications <sup>4</sup>	9%	11%	13%	12%	15%	23%	22%	20%
Other qualifications: Level unknown	6%	7%	9%	7%	7%	6%	7%	24%

## Leisure and Recreation

5.16. Within the neighbourhoods of Bewbush, Ifield, Gossops Green and Langley Green the area of open space and recreational areas have been identified, together with the key recreation and leisure sites. These are set out in the tables overleaf. This data does not however identify the quality of the leisure and recreational facilities and how this compares with other neighbourhoods in Crawley or the national average. It is generally considered that Ifield West is lacking in these (and other) facilities.

<b>Bewbush</b>		
<b>Type of Facility</b>	<b>Principal Sites</b>	
Green/Open Space:	Bewbush West Playing Field	16.47ha <b>Total Area</b>
	The Green	
	Water Gardens	
Playing pitches	Bewbush Leisure Centre	13.57ha
Equipped play space		1.65ha
Informal play space		1.25ha
Community Centre:	Bewbush Community Centre	
<b>Area of open space per population</b>		0.0018ha
<b>Ifield</b>		
<b>Type of Facility</b>	<b>Principal Sites</b>	
Green/Open Space:	Ifield Green	14.98ha <b>Total Area</b>
	Rusper Road	
	Ifield Mill SNCI	
	Ifield Brook Wood SNCI	
Playing pitches		13.91ha

<sup>1</sup>Level 1 qualifications cover: 1+'O' level passes; 1+ CSE/GCSE any grades; NVQ level 1; or Foundation level GNVQ.

<sup>2</sup>Level 2 qualifications cover: 5+'O' level passes; 5+ CSE (grade 1's); 5+GCSEs (grades A-C); School Certificate; 1+'A' levels/'AS' levels; NVQ level 2; or Intermediate GNVQ.

<sup>3</sup>Level 3 qualifications cover: 2+ 'A' levels; 4+ 'AS' levels; Higher School Certificate; NVQ level 3; or Advanced GNVQ.

<sup>4</sup>Level 4/5 qualifications cover: First Degree, Higher Degree, NVQ levels 4 and 5; HNC; HND; Qualified Teacher Status; Qualified Medical Doctor; Qualified Dentist; Qualified Nurse; Midwife; or Health Visitor.

Equipped play space		0.35ha
Informal play space		0.72ha
Community Centre:	Ifield Drive Community Centre	
	Ifield West Community Centre	
	Scout Hut	
	Masonic Hall	
<b>Area of open space per population</b>		0.0018ha
<b>Gossops Green</b>		
<b>Type of Facility</b>	<b>Principal Sites</b>	
Green/Open Space:	Woodhurst-lea wood SNCI	6.69ha <b>Total Area</b>
	Dormans playing field	
Playing pitches		0.97ha
Equipped play space		0.23ha
Informal play space		4.91ha
Community Centre:	Gossops Green Community Centre	
	Arts Youth Centre, Dormans	
	Scout Hall	
<b>Area of open space per population</b>		0.0020ha
<b>Langley Green</b>		
<b>Type of Facility</b>	<b>Principal Sites</b>	
Green/Open Space:	Willoughby Fields SNCI	21.38ha <b>Total Area</b>
	Ewhurst Wood SNCI	
	Cherry Lane	
Playing pitches		18.29ha
Equipped play space		1.25ha
Informal play space		1.84ha
Community Centre:	Youth Centre	
	Langley Green Community Centre	
<b>Area of open space per population</b>		0.0029ha

Sites and Areas of recreation and leisure facilities in Ruspur Parish.

Type of Facility	Existing Provision (sq m)	Provision Above or Below basic requirement
Allotments	0	Below
Amenity greenspace	3,277	Below
Artificial turf pitches	0	Below
Equipped play	800	Above
Grass Pitches	12,000	Below
Natural green space	0	Below
Other outdoor sports facilities	1,296	Below
Youth Activity Areas	0	Below
Village and community halls	179	Below
Sports halls	0	Below

Source: Horsham District Council PPG17 Assessment (2004)

4.16 In addition to the provision of specific recreational facilities within Crawley, the western neighbourhoods adjoin a large area of countryside within Horsham District. There are good footpath and bridleway links to much of this area, which provides many opportunities for residents to use the area for more informal recreation.

## Transport

5.17. The road network surrounding the area of study contains two A roads, the A264 which runs to the south of the study area. Any development to the west of Bewbush will require access of this road. The A23 runs from the south of Crawley to Brighton and the south coast.

5.18. There are 2 railway stations on either side of the study area, Ifield to the east and Faygate to the west. These are both situated on the Southern railway.

5.19. Car ownership in the settlements of Crawley and Horsham is high. Nearly 88% of households in Horsham and 80% of Households in Crawley have at least 1 car. Figures for 2 car ownership for both settlements are 26% (Crawley) and 36% (Horsham), which is high when compared at a national level. (2001 Census).

5.20. Crawley has a high level of in-commuting (numbering 33,000). Given the high levels of car ownership it is perhaps unsurprising that for both Horsham and Crawley around 68% of people travel to work by car. 45% of people in Ifield travel to work by car whilst in Bewbush 44% travel by car. In Langley Green 54% travel to work by car whilst 64% travel to work by car in Gossops Green. Walking is the next most popular mode of transport, with train, bus and cycling with low levels of uptake. There are also relatively high levels of commuting to London from both settlements.

5.21. The Fastway Service was introduced in Crawley in 2005, the result of this is an increase of 96.1% in bus patronage between June 2001 to June 2007 within the western neighbourhoods (Source- Metrobus).

## Employment

5.22. Unemployment levels in the Crawley Borough and Horsham District are lower than the national average. Levels of unemployment are however higher in Crawley than in Horsham, with levels in Bewbush being higher than Crawley's average.

5.23. The working population of the Bewbush and Ifield is employed in a wide range of occupations, but there are lower percentages of people employed in managerial and professional occupations in these wards than for the Crawley and Horsham District average. Instead the two wards have a higher number employed within elementary occupations. These figures, together with the unemployment data, are set out in more detail in the tables below.

**Table 13: Levels of unemployment within Horsham and Crawley**

	Bewbush (%)	Ifield (%)	Gossops Green (%)	Langley Green (%)	Crawley (%)	Rusper and Colgate (%)	Horsham (%)	GB (%)
<b>All people-working age</b>	<b>64.7</b>	<b>60.4</b>	<b>62</b>	<b>61</b>	<b>62.1</b>	<b>62.6</b>	<b>60.1</b>	<b>61.5</b>
Economically active	81.9	84.4	71	62	83.5	79.4	82.2	76
Employees	73	74.4	62	57	73.7	60.7	67.7	62.6
Self employed	5.5	7.1	6	5	7	17	12.5	9
<b>Unemployed</b>	<b>4.1</b>	<b>3.4</b>	<b>2</b>	<b>3</b>	<b>3.4</b>	<b>2.1</b>	<b>2.4</b>	<b>5.8</b>

Source: National Statistics 2001

**Table 14: Population employed in different occupations**

	Bewbush (%)	Ifield (%)	Langley Green (%)	Gossops Green (%)	Crawley (%)	Rusper and Colgate (%)	Horsham (%)	GB (%)
1 Managers and senior Officials	9.8	12	9.94	12.82	14.2	22.6	20.4	15
2 Professional	4.2	7.5	5.65	7.63	8	12.2	12.9	11
3 Associate professional & technical	10	11.3	9.55	12.08	12.4	16	15.4	14
4 Administrative & secretarial	14.1	16.3	12.82	16.68	15.4	12.3	13.9	13
5 Skilled trades	10.3	10.8	10.38	10.15	9.5	11.1	10.5	12
6 Personal services	7.5	9.7	7.02	8.14	8.7	7	7.1	6.9
7 Sales and customer services	13.3	9.9	11.13	11.21	10.3	6	6.6	7.7
8 Process plant and machine operatives	10.5	9.2	10.89	8.38	8.4	5.5	4.8	8.7
9 Elementary occupations	20.2	13.3	22.61	12.9	13.1	7.3	8.3	12

Source: National Statistics 2001

5.24. Crawley is an important town in terms of its role as a centre for employment within the north Sussex area. Gatwick Airport, on the northern boundary of the town, is a particularly large employer, together with related industries provide 25,000 jobs. This equates to 29% of the jobs that are available in the town.

## Retail

5.25. The retail sector forms an important part of Crawley Borough's economy. 20.1% of all businesses are in the Retail & Distribution sector, and retail employs 16% of the workforce (7.5% are employed in distribution) (Annual Business Inquiry Employee Analysis 2004). Crawley town centre has an important role in retail terms both within the town and also in the wider area. Nationally the retail catchment ranks 54th out of 4,500 (EXPERIAN GOAD) and those that visit the town to shop spend £500.22 million annually. A high retail spend is possible as those that shop in the town are

ranked the 19th most affluent on a national basis (PROMIS PMA Affluence Indicator).

5.26. In addition to Crawley town centre, each ward in the town also has a shopping parade/s constructed as part of the neighbourhood. These shops do not compete with the town centre and instead help meet more basic day to day needs. Ifield has a retail floorspace of (A1) of 1,036m<sup>2</sup>. Bewbush Parade has a retail floorspace (A1) of 1,421m<sup>2</sup>, Langley Green has 1,443m<sup>2</sup> retail floorspace within the parade and Gossops Green 436m<sup>2</sup> (calculated from GIS data).

## Cultural Heritage

5.27. Within the area to the West and North West of Crawley there are some areas which are of historical importance. The most important of these are as follows:

- Scheduled Ancient Monument at Ifield Court Farm: – setting includes former park land.
- Ifield Village Conservation Area:– This area is characterised by its small village nucleus with low-density development, historic settlement pattern and rural recreational uses. It is characteristic of settlements formed in clearings of the Sussex Weald. The countryside edge is important to the setting of the Conservation Area, and therefore needs to be considered.
- Listed Buildings – various grade II listed buildings in the area, the settings of which would need to be considered as part of the development proposals.

In addition to the historical value of the area, the use of the area is also important in cultural terms.

## Biodiversity, Flora and Fauna

5.28. The area to the West and North West of Crawley contains several areas which have been identified as being of importance for Nature Conservation. Some of these areas have been designated as a Site of Special Scientific Interest (SSSI) or a Site of Nature Conservation Importance (SNCI). The locations of these are marked on the map in the Environment Chapter of the main Issues and Options document, and further details about each site are set out in the table below:

<b>Name of Site</b>	<b>Site details</b>
House Copse SSSI	An area of ancient coppiced woodland dating back to the middle ages. Species of importance include the small leaved lime which is rare in the south-east. The site was assessed as being in favourable condition by the English Nature in 2004.
SNCI nr Lower Prestwood Farm	This woodland site is of importance for its mosses and liverworts.
Orltons Copse SNCI	An area comprising ancient woodland, streams and hay meadow. It is of importance for several bird species including nightingale, goldcrest and tawny owl.
Kilnwood Copse SNCI	An area of woodland and ponds. It also contains the small leaved lime as well as mosses and liverworts.
Hyde Hill SNCI	An area of ancient woodland, stream and neutral grassland. Species include small leaved lime, wild service tree and a wide variety of birds.
Ifield Brook and Meadows	Neutral grassland, semi natural woodland and stream. Species include

	birds-foot-trefoil, yellow rattle, bluebells, butterflies, damselflies and kingfishers.
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- 5.29. In addition to the SNClS and SSSlS, there are other areas of nature conservation interest in the area including lfield Wood which has been identified as an area of ancient woodland. There are also numerous hedgerows in the area that may be of importance.
- 5.30. In summer 2000 HDC undertook an ecological survey of the land to the West and North West of Crawley. As part of the study areas of important 'conservation grassland' were identified. These grasslands have not been 'improved' with fertilisers and are therefore more species rich.

## Landscape

- 5.31. Much of the landscape surrounding Crawley is of high quality. The High Weald Area of Outstanding Natural Beauty (AONB) is located to the south and east of the town, and is of national importance. Any possible impacts of the development on the setting of the AONB should be identified and methods of minimising and softening the impacts should be considered in the design and layout of the development. The landscape to the west and north of the town is not designated, but some of it is still of high quality. This has been noted in landscape studies that have been undertaken in the area. The land is mainly used as pasture but there is also a golf course in the area.
- 5.32. The Horsham District Landscape Character Assessment identified a number of landscape areas within the District of which four fall within or adjoin the identified area of search. (This work did not examine the landscape outside the District boundary, for example to the north of Crawley.) More information about these character areas is set out in the table below.

<b>Character Area</b>	<b>Main features</b>	<b>Condition and Sensitivity</b>
I2 – Warnham and Ruser Wooded Ridge	Rural and undulating Small pasture fields divided by hedges shaws and ghylls. Some noise intrusion from Gatwick Airport. Local vernacular of timber, brick, tile hanging and weather boarding.	The landscape condition is generally good and sensitivity to change is high. Urban development, poor woodland and hedgerow management and traffic all threaten the landscape.
K1 – Upper Mole Farmlands	Mainly flat land with medium sized fields. Some small areas woodland, some field trees and ponds. Affected by noise from Gatwick Airport and visual impact of Crawley.	Condition of landscape is declining due to horsification / noise and visual intrusion. The area has a moderate sensitivity to change, although the remaining woods, unimproved grasslands and historic lanes are more sensitive. Threats include loss of hedgerows, urban development and increasing traffic.
K2 – Warnham and Faygate Vale	Flat / gently undulating clay vale. Dominated by road and rail. Some areas of visual intrusion from retail and industrial, sand and gravel workings.	The condition of the landscape is declining, and locally poor where visual intrusion. Sensitivity to change is moderate. Threats include urban development and

		increased traffic.
L1 – St Leonard’s Forest	To south of area of search. Comprises wooded ridges and ghylls, with conifer plantations interspersed with deciduous woods. Some heathland. Local vernacular includes sandstone tile hanging and brick.	Condition is declining whilst the sensitivity to change is high. Threats to the area include loss of heathland, rhododendron invasion, loss of ancient woodland and suburbanisation / urban edge development.

5.33. In addition to the Landscape Character Assessment work, a more detailed study of the urban –rural fringe around the western side of Crawley was undertaken in May / June 2006. This study again highlighted the high quality of much of the landscape to the west and north west of Crawley, and also identified the positive relationship this side of the town has with the adjoining countryside. This is partly because other edges of the town have physical barriers between the town and the landscape in the form of roads, industry and Gatwick Airport.

5.34. The Study considered all potential sites, and identifies three possible sites which could accommodate development. These are, land between Gatwick and Langley Green, Ifield Golf Course and land between Faygate and Bewbush.

### Soil

5.35. Within the West and North West of Crawley search area the soil is in the main, likely to be in good condition. It is, however, predominantly clay which can make drainage difficult. The area is predominantly agricultural and there are few industrial sources of pollution. Possible areas where contamination may exist include areas adjacent to roads, which may be contaminated by pollutants such as lead and landfill / earthwork sites. Details in relation to those in the area are as follows:

- Buchan Hill Forest Crawley (LB/1/63) – used for the disposal of household refuse. In early stages the site resulted in water pollution but this has subsequently been resolved. The site has now been restored to woodland.
- Bewbush north of A264 (LB/20/71) – Site used for controlled tipping of construction waste of silts and clays. Inert waste has been tipped on the adjoining land at Holmbush since 1977 (CG/29/97) and (CG/42/02). This use ended in May 2006 with restoration still ongoing. Monitoring of the site will be completed in late 2007 and it is anticipated that an application for the licence surrender will be submitted to the Environment Agency in early 2008. This will be formally granted in Autumn 2008.
- Little Foxes, Ifield Wood, Charlwood Road, RS/20/84 – Tipping of clay and other sub-soils to raise low lying land for garden.
- Bonwyks Place, Ifield RS/6/86 – Tipping of sub and topsoil to restore site to ground level for agriculture.
- Holmbush Potteries LB/39/53 – A former clay pit granted consent for infilling with construction refuse.

### Water

5.36. The two main watercourses in the land to the West and North West of Crawley are the River Mole and its tributary Ifield Brook. The indicative floodplain maps produced by the Environment Agency show that both watercourses have fairly narrow flood

plains, but nevertheless a few properties do fall within them, particularly in the Ifield area. It will be necessary to ensure that any new development does not increase the risk of flooding or build in the existing flood plain.

- 5.37. As part of the preparation of the JAAP and the SA/SEA process it will be necessary to collect more information on flood risk as part of a Strategic Flood Risk Assessment for the study area (in accordance with PPS25 and its practice guide companion). Work on a Strategic Flood Risk Assessment is currently being undertaken for Horsham District, Crawley and Reigate and Banstead Borough Councils. The SFRA, data for the West of Crawley area is available and the results of this study will influence the content of the Preferred Options.
- 5.38. Limited information is available about the water quality for the Mole and Ifield Brook, although available river quality data shows that in general river quality in Horsham District and Crawley Borough is good. Furthermore, the 1993 study of the Mole shows it to have a good species assemblage which would indicate that the area has a good water quality. The nearest area with lower water quality is at Gatwick airport, but this is downstream of the two watercourses and is not therefore likely to have any effect on water quality on the area in question.
- 5.39. The Mole Catchment Abstraction Management Strategy aims manage the abstraction of water from the river, but while conserving aquatic habitats.
- 5.40. In addition to flooding and river quality, the issue of water as a resource is also important. The National Average domestic water consumption is 155 litres per day unmeasured and 136 litres per day measured. Crawley is within the Sussex North water supply area, the estimated domestic consumption in 2005/06 for this area was 154 litres per day unmeasured and 140 litres per day measured (information is not available from Southern Water for Crawley at a Borough level). The long term trend for water consumption in the region has been to increase by 50% in the last 25 years. This is in itself increasing pressure on existing water resources, and this would potentially be increased by the additional population growth.
- 5.41. Water supply in Horsham District is abstracted from the River Rother which feeds into the River Arun and from boreholes at Hardham. The Appropriate Assessment of Horsham District Council's Core Strategy found that additional supply for new housing could affect the water levels in the River Arun and could affect groundwater levels within the Arun Valley Special Protection Area (SPA), this could have an adverse effect on the SPA.
- 5.42. Southern Water has stated that there is a need to plan for the provision of additional water resources to meet the demands of the new development. Southern Water requires new development and incorporation of water efficiency measures in parallel with water transfers from areas of surplus before additional resources are developed.
- 5.43. Crawley Sewage Treatment Works would serve the new development, however to be able to deal with the increased demand from the new development it would need to be upgraded. This would be in the form of an extension which would be difficult due to a shortage of available surrounding land. Thames Water therefore proposes to drain sewage from the new development to a new sewage treatment facility.

## **Air**

- 5.44. Under the requirements of the 1995 Environment Act, both Crawley Borough and Horsham District Councils have had to investigate their local air quality and determine whether levels of air pollutants are likely to exceed specified levels, and if necessary, declare a Local Air Quality Management Area (LAQM) with an action plan to reduce levels of air pollution.
- 5.45. Within Horsham District, the only potential for air pollutants to exceed the government levels is in Horsham town itself and monitoring of air pollution levels has therefore been focussed on these areas. Monitoring of air pollution has taken place in Crawley Borough which is closer to the West and North West of Crawley development area and therefore more likely to impact on this area.
- 5.46. Studies of a range of air pollutants in Crawley revealed that nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM10s) may exceed government levels, particularly around Gatwick Airport but it was not considered that levels were sufficiently high to warrant Local Air Quality Management. Although the land to the West and North West of Crawley is close to Gatwick it is unlikely that current air pollution levels in the search area are poor as the prevailing wind is westerly which would blow any pollution from Crawley or Gatwick away from this area.

## **Noise**

- 5.47. The proximity of Gatwick Airport means that much of the land West and North West of Crawley is affected by noise from aeroplanes taking off and landing.. In recent years noise from aircraft has fallen due to improved technology, but this effect could be reversed if aircraft numbers increase significantly. Noise levels in the area would also increase in the event of a second runway south of the existing.
- 5.48. The Urban and Rural Fringe Study identified potential areas for development. Due to noise restrictions to the north of the area of study any development within the area would be subject to noise levels above recommended levels. Therefore the study identified that residential is not a suitable use within this area.

## **Climatic Factors**

- 5.49. Information on climate change at a local level is not currently available, but data at a District, Borough and higher level shows that temperatures in the UK are rising. It is predicted that overall, winters are likely to become warmer and wetter, and summers hotter and drier. Emissions of gases which contribute to climate change have increased since 2002. There have been particularly high increases in emissions from transport since 1990.
- 5.50. To help reduce reliance on fossil fuels, renewable sources of energy can be used. To date however just 0.65% of energy is produced from renewable sources in the south east.
- 5.51. Information from DEFRA shows the contribution from each local authority towards carbon dioxide emissions. It shows that in 2004 Crawley had a contribution of 2.3 tonnes per capita, and Horsham 2.8 tonnes. Within Crawley the contributions per year from industrial and commercial is 405 tonnes, from domestic 229 tonnes and road transport 149 tonnes. Horsham's contribution is 349 tonnes per year from industrial and commercial, 347 tonnes from domestic and 373 tonnes from road transport.

## **Use of Resources**

- 5.52. In 2002/3 Crawley created 331kg of waste per person. This is below the regional average of 529kg. This is rising by 2 to 3% per annum.
- 5.53. Currently 22.75% of domestic refuse in Crawley is recycled or composted. The 2005/2006 target was set at 30%. Horsham has a recycling figure of 34.9% and exceeds its target of 30% (DEFRA 2006).
- 5.54. Information has shown that Crawley has a total energy consumption of 2,529.7 Gwh (giga watt hour). The largest proportion of this use was gas at 1,101 Gwh followed by petroleum products and electricity, only 1.5 Gwh (0.06%) came from renewable sources (Department for Trade and Industry, 2004).
- 5.55. The Draft South East Plan aims to encourage developers of schemes of over 10 homes or 1,000m<sup>2</sup> floorspace to meet 10% of energy demand from renewable energy.

## **Evolution without implementation of the JAAP**

- 5.56. The baseline sets out the area characteristics at present. Due to natural increase and migration the population of the study area will continue to increase. National Statistics data suggests that the population of Crawley will reach 104,700 by 2010 and the overall UK average increase in population is 0.42 percent per annum. This increase will put added pressure on resources and result in an increased need for infrastructure facilities and housing.
- 5.57. The non-provision of housing would mean that the housing and affordable housing targets would need to be met in another location, which would be less sustainable in the long term.
- 5.58. Without the implementation of the JAAP the landfill site would be left to return to its natural state. This would be likely to occur over a long period of time and would result in benefits to the landscape, biodiversity and ecology of the area. However, the infill material would remain, possibly having implications on water and soil quality.

## 6. SUSTAINABILITY ISSUES AND FRAMEWORK

### Sustainability Issues

- 6.1. From the analysis of the plans and programmes and the baseline data for the West and North West of Crawley Strategic Location, it is possible to identify a range of sustainability issues facing the area. In addition to this, further sustainability issues have been identified following stakeholders meetings with officers from both Councils and external organisations such as Rusper Parish Council, Bewbush Community Forum and Ifield Village Conservation Area Advisory Committee.
- 6.2. The key issues summarised in the box below are discussed in more detail in the following paragraphs. The issues have been grouped under three main headings; Social, Economic and Environmental. It should however be noted that some of the issues are cross cutting in nature and could be placed under more than one category.

#### **Figure 1- KEY SUSTAINABILITY ISSUES - WEST AND NORTH WEST OF CRAWLEY STRATEGIC DEVELOPMENT**

- There is a need to provide a range of housing that is affordable and meets the needs of the population;
- New services, including health care, educational and community facilities need to be provided to meet the needs of the new and where appropriate to help meet needs of existing residents such as in Ifield West;
- Public transport will need to be provided and where necessary improved. Walking and cycling opportunities will need to be provided;
- Any new road layout needs to be designed to limit severance between the town and the high quality landscape that adjoins the western edge of the town. Any new road links will still need to enable traffic to move into and out of the wider area;
- Biodiversity, particularly ancient woodlands, hedgerows and the river valley should be protected and enhanced; particular care must be made to the sites in this area designated for their biodiversity importance;
- The high quality landscape which adjoins the western edge of Crawley should be protected and enhanced; the links to these rural areas from the town need to be maintained;
- The cultural and historical environment of the landscape and adjoining neighbourhoods must be protected and enhanced;
- Development in the current and future floodplain should be avoided;
- The water quality of the River Mole needs to be maintained and where possible enhanced;
- Water resources need to be protected;
- Air quality and noise levels affecting new residents need to be maintained, and where possible enhanced;
- Development needs to be designed to minimise its impact on climate change, and to be able to cope with any changes in climate that do occur.
- Employment opportunities that meet the needs of the new and existing residents needs to be provided;
- Appropriate retail provision needs to be incorporated into the new development;
- The impact of traffic on the existing road network in Crawley and the wider surrounding area should be minimised.
- The development should encourage recycling and help to reduce the amount of waste generated

## Social

- 6.3. Development in the West and North West of Crawley Strategic Location will result in an increase in the population of the area. A development of 2,500 homes is likely to house a resident population of up to 6,425 (based on an average household size of 2.57). This could have a wide range of effects on the area, from increased need to travel by car, increased pressure on existing resources to the potential for anti-social behaviour.
- 6.4. Any development that takes place will need to meet the needs of the new community by providing a range of housing types and sizes, as well as services and facilities such as education, healthcare, infrastructure and greenspace provision.
- 6.5. The development also provides an opportunity to help meet the needs of the existing residents of Crawley. At present Crawley has a comparatively young population placing a particular demand on housing, employment and services, but also a fast growing elderly population. There are also wide differences in deprivation, with the western neighbourhoods of Bewbush and Broadfield being the most deprived. Therefore the development must meet the needs of its existing population in terms of the provision of housing, employment and services, as well as providing for the new neighbourhood.
- 6.6. A key issue affecting the development is transport. The new development may result in changes being made to the existing road network, and it will be important to ensure that any new roads are designed to minimise severance with the countryside beyond.
- 6.7. Data shows that the existing community has very high levels of car ownership and most use their cars to reach their work destination, which is often relatively local. It is essential to the success of the development that this pattern is changed to ensure that undue pressure is not placed upon the existing or new road networks that arise as part of the development. As part of this it will be important to provide good pedestrian, cycle and public transport links, within and beyond the new development areas.

## Environmental

- 6.8. Development of the land to the West and North West of Crawley may result in the loss of greenfield land. It will be important to protect and enhance existing biodiversity as far as possible. Sensitive habitats that have already been identified include ancient woodlands and hedgerows and the Mole Valley corridor. Some of these habitats have been designated for their importance to biodiversity at a county or national level. Development in the area to the West and North West of Crawley will also bring about a change to the landscape much of which is of particularly high quality, and is also of historical importance. It will also be important to protect key landscape, historical and archaeological features and that development is designed to ensure that links to the countryside are retained.
- 6.9. Use of resources is also a key issue, with for example the potential for development to increase the pressure on water resources. A larger population will also increase pressure on sewerage infrastructure and it will be necessary to ensure that these facilities can cope and that the higher levels of treated water entering rivers from the sewage works does not lower the water quality of the River Mole. Development will also need to take into account the potential for the area to flood in both the current and any future floodplains that may arise as result of climate change. In addition to

this, due to rainfall patterns changing and the likelihood of intense periods of rainfall, this could result in high levels of runoff.

- 6.10. In addition to increasing flood risk, climate change may also have other effects on any new development. It will be necessary to design developments so that the buildings are able to cope with these changes - e.g. coping with warmer conditions in the summer. It will also be important to ensure that the development incorporates measures to minimise the emission of greenhouse gases, for example through the installation of renewable energy sources.
- 6.11. The development will also need to consider the impact on air quality, both from traffic and the proximity of development to Gatwick Airport. Noise from the airport and transport links is also an issue which must be taken into account.
- 6.12. Consideration will also need to be made to the waste and energy usage arising from the resident population but also during construction. Waste management and site waste management plans will need to be initiated as well as energy conservation measures.

### Economic

- 6.13. Crawley town has a strong economic base, providing a high proportion of employment of the county, compared to the proportion of land. The economy is buoyed by the presence of Gatwick Airport, and is the location of residence of many of its employees. It will be important to ensure that new employment facilities are provided that enable the new residents to live and work locally, rather than creating a commuter area. It will also be important to ensure that a range of employment opportunities are provided, to meet the variety of skills of those living the area, and for those who wish to do so to advance their careers.
- 6.14. Retail is an important sector of the economy, but the presence of Crawley town centre (and its planned redevelopment) could mean that the provision of some stores may not be viable. There may however be some opportunities to provide a new neighbourhood centre, but the role of retail within such a facility will need to be considered carefully.

## Sustainability Framework

- 6.15. In order to assess the contribution that the West and North West of Crawley Joint Area Action Plan makes in achieving sustainable development, it is necessary to compare them against a range of sustainability objectives and indicators. As part of the SA/SEA of the Horsham and Crawley Core Strategies a range of sustainability objectives and indicators were developed. Many of these are relevant to the West and North West of Crawley JAAP, but others are either too broad to apply to the West and North West of Crawley location, or are not relevant. As a result of this the objectives and indicators from each Core Strategy have been reviewed and where appropriate combined, and the following objectives are proposed below.

### **Figure 2: Proposed Sustainability Objectives for Land West and North West of Crawley**

1. To ensure that everyone has access to a good quality affordable home that meets their needs
2. To ensure that everyone has access to the health, education, leisure and recreation facilities that they require
3. To reduce crime, the fear of crime and antisocial behaviour
4. To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham.
5. To conserve and enhance the biodiversity within the West and North West of Crawley area
6. To conserve and enhance the historic and cultural environment and important green spaces within the locality
7. To reduce the risk of flooding
8. To maintain a high quality environment in terms of water quality
9. To maintain a high quality environment in terms of air quality
10. To minimise the impact of noise on residents and the wider environment
11. To minimise the use of resources, particularly water, energy and materials
12. To seek to reduce the emission of greenhouse gases, in particularly by encouraging the provision and use of renewable energy
13. To make the most efficient use of land
14. To reduce car journeys and promote alternative methods of transport
15. To ensure that development maintains, support and promote a diverse employment base to serve the local and sub-regional economy
16. To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre

## Sustainability Indicators

- 6.16. In order to measure the Councils' progress towards achieving the sustainability objectives a series of indicators have been developed. The indicators have been selected so that as far as possible they are directly attributable to the development which takes place to the West and North West of Crawley. This has not always been possible and it may be that the indicators will need to be reviewed and amended as more data becomes available.
- 6.17. Where possible, existing indicators have been chosen, for example from the Councils' Annual Monitoring Reports, 2004, and also from the SA/SEA of the two Council's Core Strategies. The list of indicators that will be used to monitor each

objective are listed in the table below. More detailed information on each indicator can be obtained by referring to the Councils' Annual Monitoring Reports or Core Strategy SA/SEAs.

<b>Table 17: Sustainability Objectives</b>	
<b>Sustainability Objective</b>	<b>Sustainability Indicator</b>
1 To ensure that everyone has access to a good quality affordable home that meets their needs	<ul style="list-style-type: none"> <li>• Number and proportion of affordable housing completions</li> <li>• % of 1,2&amp;3 bedroom houses built as a proportion of the total</li> </ul>
2 To ensure that everyone has access to the health, education, leisure and recreation facilities that they require	<ul style="list-style-type: none"> <li>• Number and type of different facilities provided as part of the development</li> <li>• Percentage of homes within 30 minutes public transport time of; a GP surgery; a hospital; a primary school and a secondary school</li> </ul>
3 To reduce actual, and fear of, crime and antisocial behaviour	<ul style="list-style-type: none"> <li>• Number of crime incident reported in the new development in comparison with other parts of Crawley</li> <li>• Post completion residents survey</li> </ul>
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	<ul style="list-style-type: none"> <li>• Condition of Landscape Character Areas K2 and L1</li> </ul>
5 To conserve and enhance the biodiversity within the West and North West of Crawley area	<ul style="list-style-type: none"> <li>• Change in areas and populations of key species and key habitats including i) change in habitats and species ii) change in areas designated for their intrinsic environmental value</li> </ul>
6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	<ul style="list-style-type: none"> <li>• Number of listed or locally important buildings lost or damaged as a result of development</li> <li>• Number of archaeological sites / historical landscapes or features lost or damaged as a result of development</li> <li>• Number of archaeological sites, historical landscapes or features and historical (listed) buildings enhanced as a result of development</li> </ul>
7 To reduce the risk of flooding	<ul style="list-style-type: none"> <li>• Number of properties / other land-uses developed in the current or future floodplain</li> <li>• Number of properties/other uses developed against the advice of the Environment Agency</li> </ul>
8 To maintain a high quality environment in terms of water quality	<ul style="list-style-type: none"> <li>• Water Quality of River Mole at measuring points at and downstream from the development site</li> </ul>
9 To maintain a high quality environment in terms of air quality	<ul style="list-style-type: none"> <li>• Number / Extent or Air Quality Management Zones</li> <li>• Complaints regarding air quality re Gatwick Airport</li> <li>• Post completion residents survey</li> </ul>
10 To minimise the impact of noise on residents and the wider environment	<ul style="list-style-type: none"> <li>• Number of new dwellings permitted within air noise contours</li> <li>• Complaints regarding noise re Gatwick Airport</li> <li>• Post completion residents survey</li> </ul>
11 To minimise the use of	<ul style="list-style-type: none"> <li>• Number of homes /buildings built to Code for</li> </ul>

resources, particularly water, energy and materials	<p>Sustainable Homes/BREEAM standards at each level</p> <ul style="list-style-type: none"> <li>• Incorporation of Sustainable Urban Drainage Systems into the development</li> <li>• Number of local recycling centres incorporated within development</li> </ul>
12 To seek to reduce the emission of greenhouse gases, in particularly by encouraging the provision and use of renewable energy	<ul style="list-style-type: none"> <li>• Number of homes / developments linked to a combined heat and power system</li> <li>• amount of renewable energy incorporated into any development as a % of the schemes predicted energy requirements</li> </ul>
13 To make the most efficient use of land	<ul style="list-style-type: none"> <li>• Percentage of dwellings completed at (i) less than 30 dwellings per ha; (ii) between 30 and 50 dwellings per ha; (iii) above 50 dwellings per ha.</li> <li>• Percentage of dwellings complying with adopted parking standards</li> </ul>
14 To reduce car journeys and promote alternative methods of transport	<ul style="list-style-type: none"> <li>• % of population travelling to work by car, cycle and foot (post completion residents survey)</li> <li>• % population within 10 minutes walk of hourly or better bus or train service</li> <li>• % population within 400m of hourly or better bus service</li> </ul>
15 To ensure that development maintains, support and promote a diverse employment base to serve the local and sub-regional economy	<ul style="list-style-type: none"> <li>• Amount of employment floorspace provided within new development areas and within the Crawley area</li> <li>• total housing provision to employment provision ratio</li> </ul>
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre.	<ul style="list-style-type: none"> <li>• Amount of new retail floorspace provided within new development areas and within Crawley town centre</li> </ul>

## 7. DEVELOPMENT OPTIONS

- 7.1. One of the key elements of the Sustainability Appraisal and Strategic Environmental Assessment process is the need to appraise a range of different options for the development plan document that is being prepared.
- 7.2. Work has been carried out on developing the different options for the West and North West of Crawley strategic location. These development options are listed below and are appraised against the sustainability objectives set out in this document.
- 7.3. A number of options have been raised as a result of preliminary discussions and representations, it is considered that not all are appropriate for consideration as part of the SA/SEA. Some of the options have been ruled out because they are precluded from consideration by higher level plans and strategies. For example, the Councils' Core Strategies state that development West and North West of Crawley should follow the 'neighbourhood' principle. This principle was found sound in the Horsham Core Strategy Inspector's report, therefore it is not appropriate to consider other options at this stage, unless there are changes to the development principles following the examinations of the Crawley Core Strategy.
- 7.4. Other options have also been ruled out because they are not considered to be sufficiently strategic in nature. For example, the Core Strategies state that development will need to provide sufficient level of services and facilities to meet the needs of residents. However it is not considered that a precise breakdown and location of these facilities are options to be considered at this stage. These should instead be examined as part of an Environmental Impact Assessment (EIA), which will need to be prepared to accompany any planning application.
- 7.5. The options that have been identified to date fall within four main categories as set out below:

### Accommodation of the neighbourhood

- 7.6. Taking into account the likely increase in development pressure from the Submitted South-East Plan, should development to the West and North West of Crawley take place within defined identified areas, or should development be more widely distributed? Options, therefore, are surrounding whether the development should be in a single large neighbourhood, or more smaller neighbourhoods. Broken down, the options for discussion are:
  - Should the development be of a single new neighbourhood located to the west of Bewbush?
  - Should the development be of a single new neighbourhood located to the west of Ifield?
  - Should the development of a new neighbourhood be split between the two areas and be located to the west of Bewbush and to the west of Ifield?
  - Should two new neighbourhoods be developed one to the west of Bewbush and one to the west of Ifield?

## Road/Transport

7.7. Development may cause added pressure on the existing road network and any potential effects on the neighbouring areas should be alleviated by providing the most appropriate access. Therefore, it is necessary to consider what should be provided alongside the development, in terms of public transport and private car provision. Options for consideration include the following:

- Should the development include a relief road from the A264 to the A23?
- Should no new roads be built other than for direct access?
- Should the development include a link road from the A23 to access development west of Ifield?
- Should the development include a link road from the A264 to access development west of Bewbush?
- Should full sustainable transport integration be provided alongside each of the transport options, this will be in the form of footpaths, cycle paths, a new train station and bus routes?

## Employment

7.8. In order to create sustainable communities all aspects of the development should meet the needs of the local residents. A development of 2,500 dwellings would create a demand for employment within the local and sub-regional area; therefore consideration should be taken into whether this should be in the form of Strategic Employment land. Options for provision are:

- Should strategic employment not be provided within the development and have neighbourhood provision only?
- Should strategic employment be provided to the west of Bewbush?
- Should strategic employment be provided to the north of Crawley?
- Should strategic employment be provided to the west of Ifield?

## Alternative Land Uses

7.9. In a development of housing the size of West of Crawley, it is essential to provide other land uses which complement this development. These may be required to alleviate any pressures on local resources that result from the development. These options are:

- Should a cemetery be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield?
- Should a Gypsy, Traveller and Travelling Showpeople site be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield? Or should the inclusion of a site be further investigated following a county wide needs assessment?
- Should a hospital be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield?
- Should a new park and ride facility be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield?
- Should a road maintenance depot be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield?

- Should a sewage treatment works be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield? Or should it not be provided in the short to medium term be considered in the longer term (post 2015)
- Should Strategic Open Space be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield?
- Should a university be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield?
- If development occurs on the golf course to the west of Ifield, should a replacement golf course be provided? If so, should it be located to the west of Bewbush, to the north of Crawley or to the west of Ifield?

## 8. RESULTS OF ANALYSIS

### Appraisal of options

8.1. Full results of the options assessment can be seen in Appendix A, a summary of results is shown below. These are assessed in terms of what option has been selected and which has been proven to be the most sustainable. Further in this section the effects and mitigation measures will be assessed.

<b>Subject</b>	<b>Options</b>	<b>Summary of Results</b>	<b>Potential impacts</b>
Development Options (accommodation of the neighbourhood)	Option a) Site the neighbourhood west of Bewbush Option b) Site the neighbourhood west of Ifield Option c) Partial (split) development west of Bewbush and Ifield Option d) Have two neighbourhoods, one west of Bewbush and one west of Ifield	Option a has been found to be the most sustainable. Providing one new neighbourhood on one site has been found to be more sustainable than providing one neighbourhood split over two sites or having two neighbourhoods on two separate sites. It was felt that the Bewbush site was more sustainable than the Ifield site due to the presence of the Ifield Village Conservation Area, and the quality of the landscape. However it has been identified that option a is likely to have negative impacts in terms of landscape, environment, air quality and flooding. <b>Option a has been chosen as the preferred option.</b> The negative impacts identified will need to be mitigated.	The landtake and increased population will have impacts on the area. Will meet housing needs of local residents.  In the short term construction would have an impact on the area in terms of traffic, noise and dust.
Transport	Option a) Build a full relief road Option b) Do not build any new roads other than for direct access Option c) Build a link road from A23 to access development west of Ifield Option d) Build a link road from A264 to access	Option b has been found to be the most sustainable. This is mainly due to the landtake that would be associated with a new relief or link road and the resulting impact on the landscape, biodiversity and greenspaces. <b>Option b has been chosen as the preferred option.</b>	Impacts could increase pressure on the existing road network.

	development west of Bewbush		
Employment	<p>Option a) Do not provide strategic employment (neighbourhood provision only)</p> <p>Option b) Provide strategic employment allocation west of Bewbush</p> <p>Option c) Provide strategic employment allocation north of Crawley</p> <p>Option d) Provide strategic employment allocation west of Ifield</p>	<p>Option a has been found to be the most sustainable. This is due to the landtake and associated impacts on the environment and landscape that strategic employment would have. However not providing strategic employment may mean that a diverse employment base is not provided and may increase car journeys to other employment sites. <b>Option a has been chosen as the preferred option.</b> The negative impacts identified will need to be mitigated against.</p>	<p>Potential increase in car journeys to employment areas. Increase vitality of existing employment areas.</p>
Alternative Land Uses	<p><b>Cemetery</b></p> <p>Option a) Provide a cemetery west of Ifield</p> <p>Option b) Provide a cemetery west of Bewbush</p> <p>Option c) Provide a cemetery north of Crawley</p> <p>Option d) Do not provide a cemetery</p>	<p>Option d has been found to be the most sustainable option. It has therefore been found that not providing a cemetery is more sustainable than providing it. <b>Option d has been chosen as the preferred option.</b> Any negative impacts identified will need to be mitigated.</p>	<p>Added pressure on existing cemetery provision.</p>
	<p><b>Gypsy and Traveller Site</b></p> <p>Option a) Provide a gypsy and traveller site west of Ifield</p> <p>Option b) Provide a gypsy and traveller site</p>	<p>Option e, to further investigate the inclusion of a gypsy and traveller site subject to a County Wide Needs Assessment, has been found to be the most sustainable option as it would provide the correct number of sites to meet the needs of gypsies and travellers. <b>Option e has</b></p>	<p>Landtake of a potential site would be greater than provision of residential dwellings. Help meet the needs of gypsies and travellers.</p>

	<p>west of Bewbush Option c) Provide a gypsy and traveller site north of Crawley Option d) Do not provide a gypsy and traveller site Option e) Further investigation of the inclusion within the area of study subject to County Wide Needs Assessment.</p>	<p><b>been chosen as the preferred option.</b> Negative impacts identified on the landscape and environment will need to be mitigated.</p>	
	<p><b>Hospital</b> Option a) Refer to a new hospital west of Ifield Option b) Refer to a new hospital west of Bewbush west Option c) Refer to a new hospital north of Crawley Option d) Do not refer to a new hospital</p>	<p>Option d, not referring to a new hospital has been found to be the most sustainable option due to the large amount of landtake and resources that a new hospital would require. <b>Option b has been chosen as the preferred option.</b> The negative impacts identified on the landscape and environment will need to be mitigated against.</p>	<p>Landtake and resource use of hospital would have great impacts. Accessibility of a hospital to local residents.</p>
	<p><b>Park and Ride</b> Option a) Provide a new park and ride facility west of Ifield Option b) Provide a new park and ride facility west of Bewbush (subject to further consideration) Option c) Provide a new</p>	<p>It has been found to be more sustainable not to provide a new park and ride facility (option d) due to the effect of large areas of hardstanding on runoff levels, and noise effects of increased car journey numbers to the area. <b>Option b has been chosen as the preferred option.</b> The negative impacts identified will need to be mitigated.</p>	<p>Impacts on landtake, flooding, car usage to and from the area.</p>

	park and ride facility north of Crawley Option d) Do not provide a new park and ride facility		
	<b>Road Maintenance Depot</b> Option a) Provide a road maintenance depot west of Ifield Option b) Provide a road maintenance depot west of Bewbush Option c) Provide a road maintenance depot north of Crawley Option d) Do not provide a road maintenance depot	It has been found to be more sustainable not to provide a new road maintenance depot (option d) due to effects on the landscape character. <b>option d has been chosen as the preferred option.</b>	Effects of the landtake. Impact on traffic to and from the potential depot.
	<b>Sewage Treatment Works</b> Option a) Build a sewage treatment works west of Ifield Option b) Build a sewage treatment works west of Bewbush Option c) Build a sewage treatment works north of Crawley Option d) Do not build a sewage treatment works Option e) Do not provide a	It has been found that not providing a sewage treatment works is the most sustainable option (option d) due to the landtake of such a facility. <b>Option e has been chosen as the preferred option.</b> The negative impacts identified on the landscape and environment will need to be mitigated against.	Impacts of the landtake of the facility.

	sewage treatment works in the short to medium term, but consider as part of the long term (post 2015)		
	<p><b>Strategic Open Space</b></p> <p>Option a) Provide strategic open space west of lfield</p> <p>Option b) Provide strategic open space west of Bewbush</p> <p>Option c) Provide strategic open space north of Crawley</p> <p>Option d) Do not provide strategic open space</p>	<p>Options a and b have been found to be the most sustainable options as designated recreation facilities for residents would help to maintain the landscape setting and biodiversity of the area. These two sites were most sustainable as they are in the potential sites for the new development, the north of Crawley cannot be considered for residential development due to the proximity of Gatwick Airport. <b>Option d has been chosen as the preferred option.</b> Any negative impacts identified in terms of access to facilities will need to be mitigated against using S106 contributions.</p>	<p>Impacts on the access to facilities by local residents.</p>
	<p><b>University</b></p> <p>Option a) Provide a University west of lfield</p> <p>Option b) Provide a University west of Bewbush</p> <p>Option c) Provide a University north of Crawley</p> <p>Option d) Do not provide a university</p>	<p>It has been found that not providing a university (option d) is the most sustainable option due to the large amount of resources required and landtake. <b>Option d has been chosen as the preferred option.</b> Any negative impacts identified will need to be mitigated against.</p>	<p>The landtake and use of resources will have an impact. Would provide for the needs of residents.</p>
	<p><b>Golf Course</b></p> <p>Option a) Provide a replacement golf course</p>	<p>It has been found to be more sustainable not to provide a replacement golf course should lfield be developed (option d)</p>	<p>No impacts.</p>

	<p>west of Ifield (if Ifield Golf Course is developed)  Option b) Provide a replacement golf course west of Bewbush (if Ifield Golf Course is developed)  Option c) Provide a replacement golf course north of Crawley (if Ifield Golf Course is developed)  Option d) Do not provide a golf course</p>	<p>because of very large landtake, use of chemicals and effect on water quality and the water resources required. For this reason <b>option d has been chosen as the preferred option.</b></p>	
	<p><b>Sustainable Transport</b>  Option a) Provide full sustainable transport integration alongside each of the transport options, in the form of footpaths, cycle paths, a new train station and bus routes?  Option b) Do not provide full sustainable transport integration alongside each of the transport options.</p>	<p>It has been found that providing sustainable transport options (Option a) is the more sustainable option. It will cut down on car usage, reduce noise and air pollution and could contribute towards the vitality of Crawley Town Centre. For this reason <b>option a has been chosen as the preferred option.</b></p>	<p>Investment in the transport network required.</p>

## Consideration of Collective Impacts

8.2. Below is a summary of the cumulative effects of the development, this has been assessed in terms of the cumulative effect on the sustainability objectives, and the effects of the selection of each of the preferred options.

	Sustainability Objective																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Preferred Option	1	☺	☺	?	☹	☹	☹	☹	☹	☹	☺	☺	☺	☺	☺	☺	☺
	2	☺	☺	?	☺	☺	☺	☹	☺	☺?	☺	☺	☺	☺	☺	☺	☺
	3	☺	☺	?	☺	☺	☺	☺	☺	☺	☺	☺	☹	☺	☹	☹	☺
	4	☺	☹	?	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
	5	☺☺	☺	?	☹	☹	☹	☹	☹	☹	☹	☹	☹?	☹	☹	☹	☹
	6	☺	☺☺	?	☹	☹	☹	☹	☹	☹	☹	☹	☹	☹	☺?	☺	☺
	7	☺	☺	?	☹	☹	☹	☹	☹	☹?	☹	☹	☺	☹	☺	☺	☺
	8	☺	☺	?	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
	9	☺	☺	?	☹	☹	☹	☹	☹	☹	☹	☹	☺	☺	☺	☺	☺
	10	☺	☹	?	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
	11	☺	☺	?	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☹	☺
	12	☺	☺	?	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
	13	☺	☺	?	☺	☺	☺	☺	☺	☺	☺	☺	☺☺	☺	☺☺	☺	☺☺

**Preferred Option**

- 1 Site the neighbourhood west of Bewbush
- 2 Do not build any new roads other than for direct access
- 3 Do not provide strategic employment (neighbourhood provision only)
- 4 Do not provide a cemetery
- 5 Further investigation of the inclusion of a Gypsy and Traveller site within the area of study subject to a county wide needs assessment
- 6 Refer to a new hospital west of Bewbush West
- 7 Provide a new park and ride facility west of Bewbush subject to further consideration
- 8 Do not provide a road maintenance depot
- 9 Do not provide a sewage treatment works in the short to medium term, but consider as part of the long term (post 2015)
- 10 Do not provide strategic open space
- 11 Do not provide a university
- 12 Do not provide a golf course
- 13 Provide full sustainable transport integration alongside each of the transport options, in the form of footpaths, cycle paths, a new train station and bus routes

8.3. The cumulative effects on the sustainability objectives are shown below. Main results show that the development and the combined uses would have a major impact on the landscape, historic and cultural environment, and also could also affect biodiversity. The increased population would put additional pressure on resources, including waste and energy and would result in more car journeys which would in turn affect noise, air quality, and emissions contributing to climate change.

<b>Table 20: Effects on sustainability objectives</b>		
<b>SA/SEA Objective</b>	<b>Summary of cumulative/synergistic effects</b>	<b>Mitigation measures</b>
1 To ensure everyone has access to a good quality affordable home that meets their needs.	Most options either have a positive effect on the provision of affordable housing or do not directly impact on it	Facilities should be provided that meet the needs of residents of a variety of housing types and sizes.
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	Facilities will be provided for the new development at a neighbourhood level. The possible provision of a hospital would have a positive effect on this objective, however not providing strategic open space or a university may have a negative impact on this objective.	The provision of services and facilities will be subject to need, and will be reviewed according to evidence available at the time. S106 contributions will be used to provide services where required.
3 To reduce actual, and fear of, crime and antisocial behaviour.	It is uncertain what effect the options will have on crime at this stage, as a result cumulative impacts are not possible to predict	The development will meet Secured By Design standards, and will be designed to discourage crime. This aims to reduce crime and anti-social behaviour.
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	It is likely several of the options will combine to add to the impact on the landscape character setting of Crawley	Due to the nature of the landfill site, remediation works could include landscaping to reduce the visual impact of the development.
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	It is likely several of the options will combine to have a larger negative impact on biodiversity, through the development of the site.	The site will to be subject to further studies to determine its importance in environmental terms, and the development will be subject to an Environmental Impact Assessment, which will also identify enhancement opportunities.
6 To conserve and enhance the historic and cultural environment and important green spaces within the locality.	Options resulting in development may cumulatively impact on the historic and cultural environment and important	The development will aim to conserve as much as possible the historic and cultural environment by complying with design

	green spaces.	standards, and the conservation of current historic features.
7 To reduce the risk of flooding	Options resulting in development may cumulatively add to the risk of flooding by increasing rates of run-off and therefore increasing the risk of flash flooding	A Strategic Flood Risk Assessment has been carried out, development in flood risk zones will be avoided. There is potential for Sustainable Drainage Systems (SUDS) to be incorporated into the design and flood protection measures installed in homes. A site specific Flood Risk Assessment will occur at a later stage.
8 To maintain a high quality environment in terms of water quality.	Several options may combine to have a negative impact on water quality this is through contaminated run-off from roads and areas of hard standing and also through the increased pressure on sewerage infrastructure.	Water companies will ensure that water quality standards will be met at all times. SUDS can also assist in reducing pollution from surface runoff.
9 To maintain a high quality environment in terms of air quality.	The new development will have a detrimental impact on air quality during construction and in the longer term. In addition the lack of strategic employment may increase car journeys.	Sustainable Transport measures will encourage the use of alternative methods of transport, which will impact on air quality.
10 To minimise the impact of noise on residents and the wider environment.	Several options which result in development are likely to combine to impact on residents and the wider environment in terms of noise.	Development will conform to noise standards of PPG24. Environmental Health standards will also be conformed with. In addition appropriate noise mitigation measures will be applied such as the use of bunding, double or triple glazing. A further detailed noise survey will be carried out and measures to minimise the impact of noise of aircraft, roads and the railway line on residents investigated.
11 To minimise the use of resources, particularly water, energy and materials.	Options resulting in development may combine to have a larger resource use	Design standards will be complied with to minimise the use of resources.
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable	The new development will emit greenhouse gases during construction and in the longer term. In addition the lack of strategic	Sustainable Transport options seek to reduce the use of the private car. The use of Combined Heat and Power (CHP) and other

energy.	employment may increase car journeys.	sustainable energy systems will be encouraged. Buildings will be designed to be energy efficient, and meet BREEAM and Code for Sustainable Homes standards.
13 To make the most efficient use of land.	Development of housing will be subject to PPS3 densities, the provision of infrastructure and other facilities to serve the development (road, hospital, park and ride, neighbourhood centre) may be a less efficient use of land than housing. However, cumulatively the use of land would be maximised for efficiency.	PPS3 requirements will be met. The best use of land will be encouraged through detailed masterplanning.
14 To reduce car journeys and promote alternative methods of transport.	The park and ride facility may encourage car use, whilst providing sustainable transport options may encourage people to reduce car journeys.	Sustainable Transport methods will be encouraged. These will include cycle and foot paths, bus services, and a potential train station.
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy.	The new development will provide neighbourhood employment provision only, this could have a negative impact on car journeys.	Any future employment provision will be subject to an identified need.
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre.	New facilities such as a park and ride facility, sustainable transport options and potentially a hospital will combine to have a positive impact on Crawley town centre.	An increase in residents would increase the use of resources and pressure to provide high quality services within the centre.

8.4. The cumulative effects of the selection of the preferred option is shown below. The main results are that the proposed uses will put additional pressure on existing facilities in the wider area such as the hospital, gypsy and traveller site facilities, cemeteries and sewage treatment facilities.

**Table 21: Effects on preferred option**

<b>Preferred Option</b>	<b>Summary of cumulative/synergistic effects</b>	<b>Mitigation measures</b>
<p><b>1</b> Site the neighbourhood west of Bewbush</p>	<p>The siting of the development to the west of Bewbush will have an impact on the landscape, biodiversity and the historic and cultural landscape of the area. The increase in population, and the associated pressures on resources could have a negative impact on flood patterns, air and water quality.</p> <p>The site itself has been used for tipping. Studies have suggested that at present there is potential for contamination of the water source (Bewbush Brook), leaching into the soils and groundwater, as well as possible vapour leakage on the site.</p>	<p>Landfill- Work has confirmed the need for land remediation measures on the site. These would need to occur before any construction could commence. This would mitigate against any of the adverse effects of the previous use of the site on its future residents.</p> <p>Biodiversity- The site does not contain any designated sites of environmental importance. The site will, however need to be subject to further studies to determine its importance in environmental terms and the development will be subject to an Environmental Impact Assessment.</p> <p>Flood prevention methods and SUDS could be incorporated into the design to mitigate against the negative effects on flooding. Water conservation and alternative methods of transport will be encouraged.</p>
<p><b>2</b> Do not build any new roads other than for direct access</p>	<p>The non-provision of a relief road will put increased pressure on existing roads. An increased population will result in more car journeys affecting noise, air quality, and climate change.</p>	<p>Due to the likely pressure on housing delivery from sub regional housing targets it is necessary to allow for the longer term. Therefore by oversizing junctions this would allow for possible development in the future. It is therefore better to mitigate against the possible effects of a road now, rather than doing it retrospectively should more development occur in the area. A full integrated transport</p>

		solution will be encouraged.
<b>3</b> Do not provide strategic employment (neighbourhood provision only)	The combined effects of not providing employment could result in more and longer car journeys, however the sustainable transport initiatives could reduce the impact.	URS Work 'Employment Provision' commissioned to inform the Preferred Options report has not identified a specific need for strategic employment allocation within the area of study. This would need to be periodically reviewed as a result of the changes in population and demographics of the study area. If a future requirement were to arise, this would be dealt with as part of any future development within the town.
<b>4</b> Do not provide a cemetery	The effects of not providing the cemetery would put increased pressure on existing provision.	A review of the need for a cemetery will be take place further into the process. It will be assessed as part of the detailed masterplanning.
<b>5</b> Further investigation of the inclusion of a Gypsy and Traveller site within the area of study subject to a county wide needs assessment	The development could encourage more gypsy and travellers to the area, and could increase pressure on current provision. Provision would have an impact on the landscape, and environment of the area.	Further review into the need for a gypsy and traveller site will occur further into the process, where the results of the countywide needs assessment will be fully taken account of. This will be addressed as part of the detailed masterplanning process.
<b>6</b> Refer to a new hospital west of Bewbush West	The enlarged population of the area would put increased pressure on existing hospitals within the area. A new hospital would have an impact on traffic levels, noise and use of resources.	The need and viability of a hospital within the area will be subject to further discussions with the PCT. This will be tackled further in the masterplanning process.
<b>7</b> Provide a new park and ride facility west of Bewbush subject to further consideration	Provision of a park and ride facility could increase car journeys to the development, however it could also reduce car journeys to the town centre, having a positive effect on the town. The landtake could have detrimental environmental effects.	Developers will be exploring the need and viability of a park and ride service within the study area. The possibility of a railway station within the area will also be subject to further developer investigation. These options will be addressed

		later as part of the detailed masterplanning process.
<b>8</b> Do not provide a road maintenance depot	The non-provision of a road maintenance depot could result in less vehicles on the road than if a depot was provided. Non-provision is a more efficient use of land.	Review into the need for a road maintenance depot will occur further into the process. Will be assessed as part of the detailed masterplanning process.
<b>9</b> Do not provide a sewage treatment works in the short to medium term, but consider as part of the long term (post 2015)	The non-provision of a sewage treatment works in the short term could result in the more efficient use of land. However, the non-provision of this facility could potentially reduce water quality if the current system cannot cope with increased demand.	The need for a sewage treatment works will be assessed as part of the detailed masterplanning process.
<b>10</b> Do not provide strategic open space	Not providing open space could result in people not having the access to formal recreation facilities. However, the provision of other play space within the development and informal recreation facilities existing alongside the site would reduce this impact. The effects of non-provision would mean that residents would continue to use the countryside as informal recreation and would not therefore result in car travel to formal facilities.	The need for a review of the need for strategic open space will be considered further into the process. It will be assessed as part of the detailed masterplanning process.
<b>11</b> Do not provide a university	The non-provision of a university could result in residents travelling outside the borough to meet their educational needs.	A university located in the town would provide good quality employment opportunities, however this is subject to a need which has not yet been identified.
<b>12</b> Do not provide a golf course	Subject to current supply, the provision of a new golf course is not required.	The preferred option is the development of the land to the west of Bewbush. Therefore there will be no need for the replacement of the golf course facility at lfield.

## Significant Effects

- 8.5. The significant effects of the West and North West of Crawley development have been identified. It has been necessary to use professional judgement to determine the significance of the effects. This has been scrutinised by Horsham District Council's Environment Co-ordinator positioned outside the Planning department.

- 8.6. The most significant effects are on the environment and the landscape of the area by the landtake for housing and associated uses. The environment will also be affected by the increased population and associated car usage. These in turn will have an effect on the air, noise and environmental quality of the study area, as well as the existing residents. These will have long term effects on the area.
- 8.7. In the short term, the effects of construction would have an impact on the area, in terms of construction traffic and potential noise.
- 8.8. The provision of additional housing will significantly affect the housing targets of the region. The development will contain at least 40% affordable housing, and will therefore meet the affordable housing needs of the local population. This will have a long term effect on housing numbers, however the level of housing need in the future is uncertain.
- 8.9. The Bewbush site has been chosen as the preferred location. By using design measures, this site seeks to reduce the impact on the environment and the landscape. Therefore the significant effects of the development are reduced. This will have a long term effect on the landscape.

### **Mitigation Measures**

- 8.10. Mitigation measures have been presented in tables 20 and 21 above. These will help combat the impacts of the development. Measures to mitigate against the negative effects on the objectives will include incorporating sustainable design and construction standards, the landscaping of the area, a Flood Risk Assessment (FRA), noise mitigation measures, providing sustainable transport as an alternative to the private car, and the use of sustainable energy sources such as CHP.
- 8.11. In terms of the mitigation of the effects of the selection of the preferred option the landfill site will be remediated from contamination and the oversizing of junctions to allow the development to be sustainable in the event of possible future expansion.
- 8.12. The effects on biodiversity will be identified through further studies carried out for the Environmental Impact Assessment. The Environmental Impact Assessment will identify any significant impacts and suggest possible methods of mitigating or compensating for these impacts.

### **Aspects of the development yet to be determined**

- 8.13. The options below are what are yet to be determined in terms of the preferred options stage. There may also be other uses which could be identified later on as a part of the masterplanning process.
- 8.14. The inclusion of a gypsy and traveller site is yet to be determined. This is subject to any need identified in the Countywide Gypsy and Traveller Accommodation Needs Assessment. If a need is identified, the inclusion of a site within the study area will be assessed against other potential sites within the Horsham District or Crawley Borough.
- 8.15. The provision of a park and ride facility is also subject to an identified need. This will be considered by the developer, and will also be affected by whether a new rail station will be provided. This is subject to the developer's negotiations with Network Rail. This detail will be determined at the masterplanning stage and will be set out fully in the submission document.

- 8.16. A sewage treatment works will not be provided in the development to the west of Bewbush. However, the provision will be determined as part of any future provision in the study area. This will be determined in consultation with the water providers, according to any identified need at the time.

## 9. IMPLEMENTATION AND MONITORING

- 9.1. This document sets out the results to date of the sustainability appraisal of the different options and policies in the West of Crawley JAAP document. The results of the appraisal have been taken into account in the preparation of the document
- 9.2. It is a requirement that the effects of the West of Crawley JAAP document are monitored. This will be achieved by monitoring the indicators which are set out in this document. The monitoring will be undertaken on an annual basis and will be incorporated into the wider annual monitoring which is required for the Local Development Framework. In accordance with the regulations regarding monitoring, the report will be prepared prior to the end of December each year. It should be noted that there may be some indicators which cannot be measured annually, depending on the type and nature of the indicator, and these will be monitored according to the timescales which are possible. The findings of these indicators will help measure how well the plan contributes to sustainable development, and inform future reviews of the plans and policies.

## 10. NEXT STEPS

- 10.1. Following the Preferred Options consultation, this report will be finalised and taken forward into the Submission stage.

## 11. COMMENTING ON THIS REPORT

11.1. We would like to hear any views you may have on this document, and we would particularly welcome any comments that you may have on the following:

- Are there any comments that you have on the methodologies?
- Do you feel that the correct options have been assessed?
- Do you feel that the correct assumptions have been made? Do you have any further suggestions?
- Do you feel that we have identified the correct effects of the preferred options, and if not what would you suggest?
- Do you feel we have correctly identified mitigation measures? Are there any more mitigation measures you would suggest?

11.2. If you would like to comment on this document please reply to:

Environmental Officer  
Strategic and Community Planning  
Horsham District Council  
Park North, North Street  
Horsham  
West Sussex RH12 1RL

or email: [strategic.planning@horsham.gov.uk](mailto:strategic.planning@horsham.gov.uk) or [ldf@ Crawley.gov.uk](mailto:ldf@ Crawley.gov.uk) by Friday 30<sup>th</sup> November, 2007.

## **APPENDIX A-Assessment of Options**

### Key

Strong positive effect:	😊😊
Positive effect:	😊
No Effect / Not applicable:	😐
Negative effect:	😞
Strong negative effect :	😞😞
Not known	?

### Development Options (accommodation of the neighbourhood)

Option a) Site the neighbourhood west of Bewbush

Option b) Site the neighbourhood west of Ifield

Option c) Partial (split) development west of Bewbush and Ifield

Option d) Have two neighbourhoods, one west of Bewbush and one west of Ifield

Sustainability Objective	Assessment of Effects	Development Options (accommodation of the neighbourhood)			
		a	b	c	d
1 To ensure everyone has access to good quality affordable home that meets their needs.	The location of the neighbourhood is not likely to have an effect on the provision of good quality, affordable homes. Option d will however provide more homes it may therefore mean that more people will have access to a good quality affordable home.	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	Facilities are likely to be provided for the new neighbourhood. It may be easier to provide a wider range of facilities for options a, b and d.	☺	☺	☹	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects are uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	Development is likely to have a negative impact on surrounding landscape features. Option a, c and d are located near to the High Weald AONB, options b, c and d will be located near to the Ifield Village conservation area. The exact impact will depend on the layout and design of the neighbourhood. Due to the larger size of the development in option d this is likely to have a larger impact.	☹	☹	☹	☹☹
5 To conserve and enhance	Each of the sites is likely to have some conservation importance. The Bewbush site	☹	☹	☹	☹☹

the biodiversity within the West and North West of Crawley area.	has a SSSI and SNCI in the surrounding area. The Ifield site has two SNCIs in the surrounding area. Although there will be no direct land take from these designated sites, they could possibly be indirectly affected by the development. The larger land take of option d may mean this will have a larger impact on biodiversity.				
6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	Each of the sites has some archaeological sites and listed buildings in the surrounding area, the West of Ifield site is relatively close to the Ifield Village Conservation Area. These are unlikely to be directly affected by the development but the new neighbourhood may affect the setting of these. The larger land take of option d may mean that this option will have a larger impact.	☹	☹☹	☹☹	☹☹
7 To reduce the risk of flooding	Some of the Bewbush site is in the floodplain. The Ifield site is not in the floodplain but is in relatively close proximity to the river Mole, the extra hard standing created by the development could cause or exacerbate existing flooding problems downstream of the river Mole. The extra hard standing created by option d may mean this option will have a larger impact. (Wait for SFRA results)	☹	☹	☹	☹☹
8 To maintain a high quality environment in terms of water quality	Each of the options is likely to have the same effect on water quality	☹	☹	☹	☹
9 To maintain a high quality environment in terms of air quality	The construction of a new development will have a negative impact on air quality. Option c may have a larger negative impact on air quality as it may require people to make more trips to reach facilities if it does not have such a wide range of facilities provided. The extent of the impact will depend on the sustainable transport links provided.	☹	☹	☹☹	☹
10 To minimise the impact of noise on residents and the wider environment	The Bewbush site is further away from Gatwick Airport and is likely therefore to be less affected by noise	☹	☹	☹	☹
11 To minimise the use of resources, particularly water, energy and materials	It is likely that options a, b and c will use the same amount of resources. Option d is likely to use more resources than these options	☹	☹	☹	☹
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision	Options a , b and d could make it easier to provide on-site renewable energy	☺	☺	☹	☺

and use of renewable energy					
13 To make the most efficient use of land	If separate facilities were provided for both sites in option c this could lead to more land usage, also providing access to two sites could take more land. However option d is likely to use the most land as it will be providing more housing.	☺	☺	☹	☹☹
14 To reduce car journeys and promote alternative methods of transport	More car journeys may be created to access facilities if the neighbourhood was split, as with c. It may also be more difficult to provide sustainable transport links to c.	☺	☺	☺	☺
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	Each of the options is likely to have the same effect on employment	☺	☺	☺	☺
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	Each option is likely to have the same effect on vitality and viability of Crawley town centre	☺	☺	☺	☺

**Option a is the most sustainable**

## Transport

Option a) Build a full relief road

Option b) Do not build any new roads other than for direct access

Option c) Build a link road from A23 to access development west of Ifield

Option d) Build a link road from A264 to access development west of Bewbush

Full sustainable transport will be integrated with each of the options a-d

Sustainability Objective	Assessment of Effects	Transport			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	Highway infrastructure is not likely to have an effect on access to a good quality affordable home	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	Each of the options is likely to enable everyone to be able to access facilities they require.	☺	☺	☺	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	A full relief road is likely to have a large impact on the landscape character setting of Crawley. A link road in options c and d will also have an impact on the landscape although as it affects less land the impact is likely to be smaller. However with option c, the proximity of the link road to Ifield village conservation area may mean that this will have a greater impact. The extent of any impact will depend on the exact location and design of either of the options.	☹☹	☺	☹☹	☹

5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	Building a full relief road is likely to have a negative impact on biodiversity as it would have a large land take, a link road is likely to have a smaller land take and will therefore have less of an impact on biodiversity. The extent of any impact will depend on the exact location of either of the options.	☹☹	☺	☹	☹
6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	Building a full relief road or link road (options c and d) may have an impact on the historical and cultural environment and important green spaces, the extent of the impact would depend on the exact location and design. Option c being located near to lfield Village may have a strong negative impact on the setting of the village.	☹☹	☺	☹☹	☹
7 To reduce the risk of flooding	The hard surface created by building a full relief road or link road may increase run off and add to the risk of flooding, the extent of this would depend on the exact location and design.	☹	☺	☹	☹
8 To maintain a high quality environment in terms of water quality	With options a, c and d the run off from the road is likely to have a detrimental effect on water quality.	☹	☺	☹	☹
9 To maintain a high quality environment in terms of air quality	Options a, c and d could potentially have a positive impact on air quality in the wider area as it may allow a more continual flow of traffic by reducing congestion. They are likely however, to have a negative impact on air quality in the close vicinity of the new road.	☺?	☹?	☺?	☺?
10 To minimise the impact of noise on residents and the wider environment	Options a, c and d are likely to create some noise, the extent of the impact on residents and the wider environment will depend on the exact location and design.	☹	☺	☹	☹
11 To minimise the use of resources, particularly water, energy and materials	The construction and maintenance of a full relief/link road will require a large amount of resources, options c and d will also require resources although they are likely to be less than option a.	☹☹	☺	☹	☹
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision	The construction of any new road will use energy and resources during the construction period therefore adding to the emission of greenhouse gases in the short term.	☹	☺	☹	☹

and use of renewable energy					
13 To make the most efficient use of land	Option a is likely to have the largest land take, options c and d are likely to have a large land take although smaller than that for option a	☹☹	☺	☹	☹
14 To reduce car journeys and promote alternative methods of transport	Providing new roads is unlikely to reduce car journeys	☺	☺	☺	☺
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	Increased provision of transport infrastructure could encourage businesses to locate in the area.	☺	☺	☺	☺
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	Option a may relieve congestion in Crawley Town Centre but may also take away passing trade. Each of the options will also have sustainable transport integration this may have a positive effect on the town centre.	☺?	☺	☺	☺

**Option b is the most sustainable**

Option a) Provide full sustainable transport integration alongside each of the transport options, in the form of footpaths, cycle paths, a new train station and bus routes?

Option b) Do not provide full sustainable transport integration alongside each of the transport options.

Sustainability Objective	Assessment of options	Sustainable Transport	
		a	b
1 To ensure everyone has access to a good quality affordable home that meets their needs.	Sustainable transport is unlikely to have an effect on access to a good quality affordable home	☹	☹
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	Sustainable transport provision will mean that residents can access the facilities they require by public transport	☺	☹
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	Sustainable transport is unlikely to have an effect on the landscape character	☹	☹
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	Providing sustainable transport options could have a positive effect on biodiversity, as it could potentially mean fewer cars on the roads which would reduce pollution	☺	☹

6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	Sustainable transport is unlikely to have an effect on the historic and cultural environment	☹	☹
7 To reduce the risk of flooding	Sustainable transport is unlikely to have an effect on flooding within the area	☹	☹
8 To maintain a high quality environment in terms of water quality	Sustainable transport is unlikely to have an effect on water quality	☹	☹
9 To maintain a high quality environment in terms of air quality	Providing sustainable transport options will encourage residents to use public transport instead of private car. This will affect air quality in the area.	☺	☹
10 To minimise the impact of noise on residents and the wider environment	Providing sustainable transport options will encourage residents to use public transport instead of private car. This will affect air noise levels from vehicles in the area.	☺	☹
11 To minimise the use of resources, particularly water, energy and materials	Providing a bus service would potentially reduce the number of car journeys therefore reducing the use of resources	☺	☹
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	Providing sustainable transport options will encourage residents to use public transport instead of private car, this will have an effect on emissions from vehicles.	☺☺	☹☹
13 To make the most efficient use of land	Providing sustainable transport is unlikely to have an effect on the use of land.	☹	☹
14 To reduce car journeys and promote alternative methods of transport	Providing sustainable transport is likely to reduce the amount of car journeys within the area, as well as promote alternative methods of transport.	☺☺	☹☹
15 To ensure that	Sustainable transport is unlikely to have an effect on the employment base within the	☹	☹

development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	economy		
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	Sustainable transport will contribute towards the vitality of the town centre by reducing travel by private car	☺	☹

**Option a is the most sustainable**

## Employment

Option a) Do not provide strategic employment (neighbourhood provision only)

Option b) Provide strategic employment allocation west of Bewbush

Option c) Provide strategic employment allocation north of Crawley

Option d) Provide strategic employment allocation west of Ifield

Sustainability Objective	Assessment of Effects	Employment			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	Strategic employment provision is not likely to have an effect on access to a good quality affordable home	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	Strategic employment provision is not likely to have an effect on access to facilities	☺	☺	☺	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from	Option a is likely to have a lesser impact on the landscape character as it will be integrated with the new neighbourhood development. Option c being located close to Gatwick Airport is likely to blend with the existing infrastructure and therefore have a smaller impact. Options b and d are likely to have the greatest impact on the landscape character and links to the countryside.	☺	☹☹	☹	☹☹

urban areas to the countryside within Horsham					
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	The provision of strategic employment will take more land than providing only neighbourhood employment. As the development area is mainly green field land options b-d are likely to have a negative impact on biodiversity, the extent of the impact will depend on the exact location.	☺	☹	☹	☹
6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	Options b-d each have some listed buildings, areas of archaeological parkscape, or archaeological sites surrounding the site. Option d is close to the Ifield Village Conservation Area .The setting of which may to be affected by strategic employment provision. Option a is likely to have a lesser impact as it will be integrated with the neighbourhood development	☺	☹	☹	☹☹
7 To reduce the risk of flooding	Run-off from hard standing that may be created by the strategic employment provision with options b-c would not be likely to reduce the risk of flooding but may exacerbate an existing risk.	☹	☹	☹	☹
8 To maintain a high quality environment in terms of water quality	Run off from hard standing that would be created by strategic employment provision may have a negative effect on water quality, this may have a larger in combination effect for option c being close to Gatwick Airport. Also the associated sewage that would be created by strategic employment provision may have a detrimental effect on water quality.	☺	☹	☹☹	☹
9 To maintain a high quality environment in terms of air quality	Option c being close to Gatwick Airport could exacerbate the problem of air quality in that area. Also the north of Crawley site being further away from the potential areas for the new neighbourhood would mean a longer commuting distance, depending on the sustainable transport links; this option may cause more car journeys, and therefore have a negative impact on air quality.	☺	☹	☹☹	☹
10 To minimise the impact	Options b to c may cause some noise impacts on residents and the wider environment.	☺	☹	☹	☹

of noise on residents and the wider environment	Option c may not have such a large impact as it is within the noise contours for Gatwick airport, however option c may have a larger impact on local residents when in combination with the noise from the airport.				
11 To minimise the use of resources, particularly water, energy and materials	Option a would use fewer resources. Options b to d are all likely to use the same amount of resources.	☺	☹	☹	☹
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	Not providing strategic employment may mean people would have to travel further for employment, if they travel by car this would contribute to the emission of greenhouse gases. Options b to c are likely to emit greenhouse gases in the short term during construction and in the long term , emissions could be reduced by encouraging the use of renewable energy sources, these would be easier to implement with options b and d as they are likely to be where the new neighbourhood will be located.	☹	☹	☹	☹
13 To make the most efficient use of land	Option a would have the smallest land take. Options b-d are likely to have the same land take, this is likely to be larger than in option a.	☺	☹	☹	☹
14 To reduce car journeys and promote alternative methods of transport	Option a may mean that people will have to travel further for employment, depending on the sustainable transport links provided, people may have to or may choose to travel by car. Options b and d are likely to be closer to the new neighbourhood therefore reducing the need for travel. Option c being located near to existing employment sites may have sustainable transport links already in place. Each option b to d could lead to inward travel to take up the new employment opportunities provided.	☹	☺	☹	☺
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	Option a would be unlikely to develop a diverse employment base as it will provide only a small range of employment opportunities. Options b to d would be likely to provide a much wider range of employment opportunities.	☹	☺☺	☺☺	☺☺
16 To ensure development contributes to maintaining and enhancing the vitality and	Providing employment away from the town centre could have a negative impact on the vitality of Crawley town centre. Option c is furthest away from the town centre. However, option a may mean that people will have to travel to other towns to find employment, and could have a negative impact on the town Centre.	☺	☹	☹☹	☹

viability of Crawley town centre				
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**Option a is the most sustainable**

## Alternative Land Uses

Option a) Provide a cemetery west of Ifield

Option b) Provide a cemetery west of Bewbush

Option c) Provide a cemetery north of Crawley

Option d) Do not provide a cemetery

Sustainability Objective	Assessment of Effects	Cemetery			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	The provision of a cemetery is not likely to effect access to a good quality affordable home.	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	A cemetery is an essential facility, it is therefore important to provide it if there is a need for it.	☺	☺	☺	☹
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	A cemetery is not likely to have a large impact on the landscape character, particularly if the cemetery is incorporated into the development. It could, depending on the location and design, help to protect links from urban areas to the countryside within Horsham.	☺	☺	☺	☺
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	Providing a cemetery could potentially have a positive impact on biodiversity, if it is incorporated into the neighbourhood development it could help to retain some green space.	☺	☺	☺	☺
6 To conserve and enhance	Providing a cemetery should not have a negative effect on the historic and cultural	☺	☺	☺	☺

the historic and cultural environment and important green spaces within the locality	environment and could, help to retain some green space.				
7 To reduce the risk of flooding	Providing a cemetery could help to reduce run-off by retaining some green space within the development.	☺	☺	☺	☺
8 To maintain a high quality environment in terms of water quality	Providing a cemetery could potentially have a negative impact on water quality depending on its location, due to contamination.	☹	☹	☹	☺
9 To maintain a high quality environment in terms of air quality	Providing a cemetery is likely to have no effect on air quality	☺	☺	☺	☺
10 To minimise the impact of noise on residents and the wider environment	Providing a cemetery is not likely to have an effect on noise	☺	☺	☺	☺
11 To minimise the use of resources, particularly water, energy and materials	A cemetery would not require the use of many resources	☺	☺	☺	☺
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	Providing a cemetery is not likely to have an effect on the emission of greenhouse gases	☺	☺	☺	☺
13 To make the most efficient use of land	A cemetery is possibly not the most efficient land use.	☹	☹	☹	☺
14 To reduce car journeys and promote alternative	The provision of a cemetery is not likely to have an effect on car journeys	☺	☺	☺	☺

methods of transport					
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	The provision of a cemetery is not likely to have an effect on employment	☹	☹	☹	☹
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	The provision of a cemetery is not likely to have an effect on vitality and viability of Crawley town centre	☹	☹	☹	☹

**Options a, b and c are the most sustainable**

- Option a) Provide a gypsy and traveller site west of Ifield  
 Option b) Provide a gypsy and traveller site west of Bewbush  
 Option c) Provide a gypsy and traveller site north of Crawley  
 Option d) Do not provide a gypsy and traveller site  
 Option e) Further investigation of the inclusion of a gypsy and travellers site within the area of study subject to County Wide Needs Assessment.

Sustainability Objective	Assessment of Effects	Gypsy and Traveller sites				
		a	b	c	d	e
1 To ensure everyone has access to a good quality affordable home that meets their needs.	Providing a gypsy and traveller site would mean that they have a home that meets their needs. Option c, providing a site north of Crawley, being within the noise contours for Gatwick Airport may make it an unsuitable site. Await results of countywide Gypsy and Traveller Needs Assessment.	☺	☺	☹	☹	☺☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	If gypsies and travellers are provided with a permanent site they will be able to access the facilities they require	☺	☺	☺	☹	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	A gypsy and traveller site is likely to impact on the landscape character setting.	☹	☹	☹	☺	☹
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	Providing a gypsy and traveller site may have a negative impact on biodiversity as it will mean the loss of green field land with either of the options a-c, and possibly e.	☹	☹	☹	☺	☹

6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	Each of the options a-c have some listed buildings, areas of archaeological parkscape or archaeological sites surrounding the area, option a is close to the Ifield Village Conservation Area, a gypsy and traveller site may have a negative impact on the setting of these.	☹☹	☹	☹	☺	☹
7 To reduce the risk of flooding	Development of either of the sites in options a-c could increase the rate of run-off and therefore increase the risk of flooding	☹	☹	☹	☺	☹?
8 To maintain a high quality environment in terms of water quality	A gypsy and traveller site is not likely to have a negative effect on water quality	☺	☺	☺	☺	☺
9 To maintain a high quality environment in terms of air quality	Providing a gypsy and traveller site is not likely to have an impact on air quality	☺	☺	☺	☺	☺
10 To minimise the impact of noise on residents and the wider environment	A gypsy and traveller site is likely not to be suitable on the north of Crawley site as it is within the Gatwick Airport noise contours	☺	☺	☹☹	☺	☺
11 To minimise the use of resources, particularly water, energy and materials	Providing a gypsy and traveller site is not likely to have an effect on the use of resources	☺	☺	☺	☺	☺
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	A gypsy and traveller site is unlikely to have a significant effect on the emission of greenhouse gases. A renewable energy supply could be provided which would help to maintain emissions of greenhouse gases.	☺	☺	☺	☺	☺
13 To make the most efficient use of land	A gypsy and traveller site may not be the most efficient use of land	☹	☹	☹	☺	☺
14 To reduce car journeys and promote alternative methods of transport	Providing a gypsy and traveller site is not likely to have an effect on car journeys	☺	☺	☺	☺	☺
15 To ensure that	The provision of a gypsy and traveller site is unlikely to have an effect on	☺	☺	☺	☺	☺

development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	employment					
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	The provision of a gypsy and traveller site is unlikely to have an effect on the vitality and viability of Crawley town centre	☺	☺	☺	☺	☺

**Option e is the most sustainable**

- Option a) Refer to a new hospital west of Ifield  
Option b) Refer to a new hospital west of Bewbush west  
Option c) Refer to a new hospital north of Crawley  
Option d) Do not refer to a new hospital

Sustainability Objective	Assessment of Effects	Hospital			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	The provision of a hospital is not likely to have an effect on access to a good quality affordable home	☹	☹	☹	☹
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	The provision of a hospital will ensure that everyone has access to the health facilities they require	😊😊	😊😊	😊😊	😞😞
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects Uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	A hospital is likely to have a large visual impact on the landscape setting of Crawley if located on any of the sites in options a to c.	☹	☹	☹	😊
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	Providing a hospital in any of the sites in options a to c is likely to have a negative impact on biodiversity as they are Greenfield sites, the extent of the impact would depend on the layout and design.	☹	☹	☹	😊
6 To conserve and enhance the historic and cultural environment and important	Each of the options a-c have some listed buildings, areas of archaeological parkscape or archaeological sites in the surrounding area, option a is close to the Ifield Village Conservation Area, a hospital may have a negative impact on the setting of these.	😞😞	☹	☹	😊

green spaces within the locality					
7 To reduce the risk of flooding	Hard standing created by building a hospital may increase run-off and contribute to the risk of flooding	☹	☹	☹	☺
8 To maintain a high quality environment in terms of water quality	Run-off from hard standing created by building a hospital may have a negative effect on water quality.	☹	☹	☹	☺
9 To maintain a high quality environment in terms of air quality	Building a hospital could have a negative impact on the air quality in the local area due to the amount of traffic that would be created going to and from the hospital, it could however have a positive effect on air quality in general as people will have to travel a shorter distance for hospital treatment.	☹	☹	☹	☺
10 To minimise the impact of noise on residents and the wider environment	A hospital is likely to create noise in the local area, this may have a larger impact with options a and b than option c as the north of Crawley site is within the Gatwick Airport noise contours.	☹	☹	☹	☺
11 To minimise the use of resources, particularly water, energy and materials	Building a hospital will use a large amount of resources in construction and running of the hospital, the amount of resources used are likely to be the same for options a-c	☹	☹	☹	☺
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	Having a hospital in the Crawley area is likely to reduce the distance that people need to travel for hospital treatment. This may therefore help to maintain the emission of greenhouse gases. Having a new hospital will require energy and resources during construction and running therefore contributing to the emission of greenhouse gases	☺	☺	☺	☺
13 To make the most efficient use of land	A hospital would take up a large area of land.	☹	☹	☹	☺
14 To reduce car journeys and promote alternative methods of transport	Having a hospital in the Crawley area is likely to reduce the distance that people need to travel to a hospital therefore reducing car journeys.	☺	☺	☺	☹
15 To ensure that development maintains,	A new hospital will provide a range of employment opportunities in the area	☺	☺	☺	☹

supports and promotes a diverse employment base to serve the local and sub-regional economy					
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	The employment produced as a result of a new hospital could have a positive impact on the vitality and viability of Crawley town centre.	☺	☺	☺	☺

**Option d is the most sustainable**

- Option a) Provide a new park and ride facility west of Ifield  
 Option b) Provide a new park and ride facility west of Bewbush subject to further consideration.  
 Option c) Provide a new park and ride facility north of Crawley  
 Option d) Do not provide a new park and ride facility

Sustainability Objective	Assessment of Effects	Park and Ride			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	The provision of a park and ride facility is not likely to have an effect on access to a good quality affordable home	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	The provision of a new park and ride facility is not likely to have an effect on access to facilities	☺	☺	☺	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects Uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	A park and ride facility may have a negative impact on the landscape character in either location. The location of this facility close to Gatwick Airport may have an effect on 'kiss and fly' at the airport.	☹	☹	☹	☺
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	A park and ride facility, due to the large area of hard standing is likely to have a negative impact on the biodiversity. The effect is likely to be the same for each site as each is green field land.	☹	☹	☹	☺
6 To conserve and enhance the historic and cultural	Each of the options a-c have some listed buildings, areas of archaeological parkscape or archaeological sites in the surrounding area, option a is close to the Ifield Village	☹☹	☹	☹	☺

environment and important green spaces within the locality	Conservation Area, a park and ride facility may have a negative impact on the setting of these the exact impact will depend on the exact layout and design.				
7 To reduce the risk of flooding	The large area of hard standing produced by a park and ride facility could increase the risk of flooding in each of the options a –c. the location of a large area of tarmac adjacent to the airport may have an added effect on the floodplain.	☹	☹	☹☹	☺
8 To maintain a high quality environment in terms of water quality	The run off from the park and ride facility may have a detrimental effect on water quality	☹	☹	☹	☺
9 To maintain a high quality environment in terms of air quality	Air quality is likely to be improved in Crawley town centre with the provision of a park and ride facility with each of the options a-c. The park and ride facility is likely however to have a negative impact on the air quality in the area surrounding the facility.	☹?	☹?	☹?	☹?
10 To minimise the impact of noise on residents and the wider environment	Traffic noise may increase in the area surrounding the park and ride facility, this is likely to be the same for each of the options a-c	☹	☹	☹	☺
11 To minimise the use of resources, particularly water, energy and materials	Building a park and ride facility is likely to a use a lot of resources particularly in the construction stage	☹	☹	☹	☺
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	A park and ride facility is unlikely to reduce emission of greenhouse gases caused by car journeys as people will still have to drive to the site.	☹	☹	☹	☹
13 To make the most efficient use of land	A park and ride facility is possibly not the most efficient use of land	☹	☹	☹	☹
14 To reduce car journeys and promote alternative	A park and ride facility is not likely to reduce car journeys in general, only those made into Crawley town centre.	☹	☹	☹	☹

methods of transport					
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	A park and ride facility is not likely to have an effect on employment	☹	☹	☹	☹
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	A park and ride facility in options a-c may enhance the vitality and viability of Crawley Town Centre by improving air quality and reducing congestion.	☺	☺	☺	☹

**Option d is the most sustainable**

- Option a) Provide a road maintenance depot west of Ifield
- Option b) Provide a road maintenance depot west of Bewbush
- Option c) Provide a road maintenance depot north of Crawley
- Option d) Do not provide a road maintenance depot

Sustainability Objective	Assessment of Options	Road Maintenance Depot			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	A road maintenance depot is not likely to have any effect on access to a good quality affordable home	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	A road maintenance depot is not likely to have any effect on access to facilities	☺	☺	☺	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	Options a-c are each likely to have a negative impact on the landscape character of Crawley	☹	☹	☹	☺
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	A road maintenance depot is likely to have a negative effect on biodiversity with each of the options a-c as these sites are greenfield land, the exact effect will depend on the design and layout.	☹	☹	☹	☺

6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	Each of the options a-c have some listed buildings, areas of archaeological parkscape or archaeological sites in the surrounding area, option a is close to the Ifield Village Conservation Area, a road maintenance depot is likely to have a negative impact on the setting of these the exact impact will depend on the exact layout and design.	☹☹	☹	☹	☺
7 To reduce the risk of flooding	Effects will depend on the exact location and design	☺	☺	☺	☺
8 To maintain a high quality environment in terms of water quality	A road maintenance depot is not likely to have an effect on water quality	☺	☺	☺	☺
9 To maintain a high quality environment in terms of air quality	A road maintenance depot is not likely to have an effect on air quality	☺	☺	☺	☺
10 To minimise the impact of noise on residents and the wider environment	A road maintenance depot is not likely to cause a large amount of noise and is unlikely therefore to impact on residents and the wider environment.	☺	☺	☺	☺
11 To minimise the use of resources, particularly water, energy and materials	The construction and running of the depot is likely to use a relatively large amount of resources	☹	☹	☹	☺
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	A road maintenance depot is unlikely to have an effect on the emission of greenhouse gases	☺	☺	☺	☺
13 To make the most efficient use of land	The landtake associated with the depot would not be the most efficient use.	☹	☹	☹	☺
14 To reduce car journeys and promote alternative	A road maintenance depot is unlikely to have an effect on reducing car journeys	☺	☺	☺	☺

methods of transport					
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	A road maintenance depot is unlikely to have an effect on employment	☺	☺	☺	☺
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	A road maintenance depot is unlikely to have an effect on the vitality and viability of Crawley town centre	☺	☺	☺	☺

**Option d is the most sustainable**

- Option a) Build a sewage treatment works west of Ifield
- Option b) Build a sewage treatment works west of Bewbush
- Option c) Build a sewage treatment works north of Crawley
- Option d) Do not build a sewage treatment works
- Option e) Do not provide a sewage treatment works in the short to medium term, but consider as part of the long term (post 2015)

Sustainability Objective	Assessment of Options	Sewage Treatment Works				
		a	b	c	d	e
1 To ensure everyone has access to a good quality affordable home that meets their needs.	A sewage treatment works is unlikely to have an effect on access to a good quality affordable home	☺	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	A sewage treatment works is unlikely to affect access to facilities	☺	☺	☺	☺	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	Options a-c may have an impact on the landscape character setting of Crawley, the extent of the impact will depend on the location and size.	☹	☹	☹	☺	☹
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	The land take required to build a sewage treatment works is likely to have a negative impact on biodiversity as each of the sites in options a-c are greenfield sites	☹	☹	☹	☺	☹

6 To conserve and enhance the historic and cultural environment and important green spaces within the locality	Each of the options a-c have some listed buildings, areas of archaeological parkscape or archaeological sites in the surrounding area, option a is close to the Ifield Village Conservation Area, a sewage treatment works may have a negative impact on the setting of these the exact impact will depend on the layout and design.	☹☹	☹	☹	☺	☹
7 To reduce the risk of flooding	Sewage treatment works often involve the removal of soil, so could affect the infiltration capacity and runoff	☹	☹	☹	☺	☹
8 To maintain a high quality environment in terms of water quality	A sewage treatment works is not likely to have a negative effect on water quality. Not providing a sewage treatment works could have a negative impact if the current system could not cope.	☺	☺	☺	☹	☺
9 To maintain a high quality environment in terms of air quality	A sewage treatment works is not likely to have a negative effect on air quality, although it could have an impact in terms of odour produced.	☹	☹	☹	☺	☹?
10 To minimise the impact of noise on residents and the wider environment	A sewage treatment works is not likely to create a large amount of noise that will impact on residents and the wider environment, except during construction.	☺	☺	☺	☺	☺
11 To minimise the use of resources, particularly water, energy and materials	The construction and running of a sewage treatment works is likely to require a large amount of resources.	☹	☹	☹	☺	☹
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	A sewage treatment works is not likely to have an effect on the emission of greenhouse gases	☺	☺	☺	☺	☺

13 To make the most efficient use of land	A sewage treatment works would take up and large area of land that could be more efficiently used.	☹	☹	☹	☹	☹
14 To reduce car journeys and promote alternative methods of transport	A sewage treatment works is not likely to have an effect on the number of car journeys taken	☹	☹	☹	☹	☹
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	A sewage treatment works is unlikely to have a significant effect on employment	☹	☹	☹	☹	☹
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	A sewage treatment works is unlikely to have an effect on the vitality and viability of Crawley town centre	☹	☹	☹	☹	☹

**Option d is the most sustainable**

- Option a) Provide strategic open space west of Ifield  
 Option b) Provide strategic open space west of Bewbush  
 Option c) Provide strategic open space north of Crawley  
 Option d) Do not provide strategic open space

Sustainability Objective	Assessment of Effects	Strategic Open Space			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	The provision of strategic open space is not likely to have an effect on access to a good quality affordable home	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	Open space is an important leisure and recreation facility and it will be necessary to ensure that the new community has access to it. Providing strategic open space in the North of Crawley will not ensure this as the new community cannot be located in this area due to the airport noise. Await results of PPG17 study for the need of open space in the area to the north of Crawley.	☺☺	☺☺	☹	☹
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	Strategic open space in either location a-c is likely to maintain and possibly enhance the landscape character setting of Crawley. Not providing strategic open space will have no effect on the landscape character setting of Crawley. Although not formally defining it will mean that it is not safeguarded against any future development.	☺	☺	☺	☺
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	Providing strategic open space may help to conserve biodiversity within the area by retaining green space. Not retaining an area of strategic open space will have no effect on biodiversity as the area of study is largely a Greenfield site, however not identifying it as strategic open space will mean that it is not safeguarded against any future development.	☺	☺	☺	☺
6 To conserve and enhance	By providing strategic open space, important green space will be conserved and could	☺	☺	☺	☺

the historic and cultural environment and important green spaces within the locality	help to conserve the historic and cultural environment. Not providing strategic open space will have no effect on the historical and cultural environment.				
7 To reduce the risk of flooding	Retaining open space may help to reduce rates of run off and therefore contribute to reducing the risk of flash flooding. Not providing strategic open space is likely to have no effect on flooding as the area of study is largely a Greenfield site.	☺	☺	☺	☺
8 To maintain a high quality environment in terms of water quality	The Provision of strategic open space is not likely to have an effect on water quality	☺	☺	☺	☺
9 To maintain a high quality environment in terms of air quality	Strategic open space could have a positive effect on air quality by retaining green spaces	☺	☺	☺	☺
10 To minimise the impact of noise on residents and the wider environment	It is unlikely that the provision of strategic open space will have an effect on noise impacting on residents and the wider environment	☺	☺	☺	☺
11 To minimise the use of resources, particularly water, energy and materials	It is unlikely that providing strategic open space will have an effect on the use of resources	☺	☺	☺	☺
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	Retaining areas of greenery and planting crops on the land could help to absorb CO <sub>2</sub> and therefore maintain levels of greenhouse gases. Not providing strategic open space is not likely to have an effect on emission of greenhouse gases, as the land will remain in its current state.	☺	☺	☺	☺
13 To make the most efficient use of land	Providing strategic open space would not involve development of the same scale as other uses.	☺	☺	☺	☺

14 To reduce car journeys and promote alternative methods of transport	It is unlikely that providing strategic open space will have an effect on reducing car journeys	☺	☺	☺	☺
15 To ensure that development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy	It is unlikely that providing strategic open space will have an effect on employment	☺	☺	☺	☺
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	It is unlikely that providing strategic open space will have an effect on the vitality and viability of Crawley town centre	☺	☺	☺	☺

**Options a and b are the most sustainable**

- Option a) Provide a University west of Ifield
- Option b) Provide a University west of Bewbush
- Option c) Provide a University north of Crawley
- Option d) Do not provide a university

Sustainability Objective	Assessment of Effects	University			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	A university is not likely to have an effect on access to a good quality affordable home	☹	☹	☹	☹
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	Providing a university in any of the three sites in options a-c would ensure access to an important education facility	☺	☺	☺	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	A university is likely to have an impact on the landscape character setting of Crawley	☹	☹	☹	☺
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	Building a university may have a negative impact on biodiversity due the large land take it will require on green field land	☹	☹	☹	☺
6 To conserve and enhance the historic and cultural	Each of the options a-c have some listed buildings, areas of archaeological parkscape or archaeological sites in the surrounding area, option a is close to the Ifield Village	☹☹	☹	☹	☺

environment and important green spaces within the locality	Conservation Area, a university may have a negative impact on the setting of these the exact impact will depend on the layout and design.				
7 To reduce the risk of flooding	Options a-c may increase the risk of flooding due to the amount of hard standing that will be created this will however depend on the location and design.	☹	☹	☹	☺
8 To maintain a high quality environment in terms of water quality	Providing a university is not likely to have an effect on water quality	☺	☺	☺	☺
9 To maintain a high quality environment in terms of air quality	Options a, b and d are not likely to have an impact on air quality. Option c, being within the Gatwick noise contours will mean that any associated halls of residence will not be able to be provided on the same site, this could lead to travel between the two sites possibly therefore affecting air quality	☺	☺	☹	☺
10 To minimise the impact of noise on residents and the wider environment	It is unlikely that a university will cause a significant amount of noise on local residents and the wider environment. Option C is within Gatwick Airport noise contours.	☺	☺	☺	☺
11 To minimise the use of resources, particularly water, energy and materials	Building a university is likely to require a large amount of resources during construction and running	☹	☹	☹	☺
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	Building a university may contribute to the emission of greenhouse gases during construction and running this could be reduced by installing a renewable energy source. If option c did lead to more car journeys being made due to travel between sites then this option would have a larger impact.	☹	☹	☹☹	☺
13 To make the most efficient use of land	The amount of land used will depend on the design and layout	☺	☺	☺	☺
14 To reduce car journeys and promote alternative methods of transport	Option c may lead to more car journeys being made as halls of residence would not be able to be provided on the same site as the university. Options a and b are not likely to have an effect on car journeys	☺	☺	☹	☺
15 To ensure that	Options a-c are likely to provide a wide range of employment opportunities	☺	☺	☺	☹

development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy					
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	Options a-c are likely to enhance the vitality and viability of Crawley town centre	😊😊	😊😊	😊😊	😊

**Option d is the most sustainable**

- Option a) Provide a replacement golf course west of Ifield (if Ifield Golf Course is developed)  
 Option b) Provide a replacement golf course west of Bewbush (if Ifield Golf Course is developed)  
 Option c) Provide a replacement golf course north of Crawley (if Ifield Golf Course is developed)  
 Option d) Do not provide a golf course

Sustainability Objective	Assessment of Options	Golf Course			
		a	b	c	d
1 To ensure everyone has access to a good quality affordable home that meets their needs.	A golf course is unlikely to have an effect on access to a good quality affordable home	☺	☺	☺	☺
2 To ensure that everyone has access to the health, education, leisure and recreation facilities they require.	Replacing the golf course will ensure that the same level of recreation and leisure facilities are provided but it will not provide any additional facilities	☺	☺	☺	☺
3 To reduce actual, and fear of, crime and antisocial behaviour.	Effects uncertain	?	?	?	?
4 To maintain and enhance the landscape character setting of Crawley including the protection of links from urban areas to the countryside within Horsham	A golf club may have a negative impact on the landscape character setting of Crawley	☹	☹	☹	☺
5 To conserve and enhance the biodiversity within the West and North West of Crawley area.	Although a golf club will retain a large amount of green space, the managed nature of the golf courses may mean that It will have a negative effect on biodiversity	☹	☹	☹	☺
6 To conserve and enhance	Each of the options a-c have some listed buildings, areas of archaeological parkscape	☹	☹	☹	☺

the historic and cultural environment and important green spaces within the locality	or archaeological sites in the surrounding area, option a is close to the lfield Village Conservation Area, a golf course may have a negative impact on the setting of these the exact impact will depend on the layout and design.				
7 To reduce the risk of flooding	Retaining areas of green space will not effect flood risk	☺	☺	☺	☺
8 To maintain a high quality environment in terms of water quality	If pesticides and herbicides etc were used on the golf course these could possibly have a detrimental effect on water quality through run-off	☹	☹	☹	☺
9 To maintain a high quality environment in terms of air quality	It is unlikely that a golf course will have an effect on air quality	☺	☺	☺	☺
10 To minimise the impact of noise on residents and the wider environment	It is unlikely that a golf course will have an effect on noise	☺	☺	☺	☺
11 To minimise the use of resources, particularly water, energy and materials	Maintaining the golf course is likely to require large amounts of water	☹☹	☹☹	☹☹	☺
12 To seek to reduce the emission of greenhouse gases, in particular by encouraging the provision and use of renewable energy	It is likely that a golf course will not have an effect on emission of greenhouse gases	☺	☺	☺	☺
13 To make the most efficient use of land	A golf course would not be an efficient use of land.	☹	☹	☹	☺
14 To reduce car journeys and promote alternative methods of transport	A golf course in either location is likely to cause more car journeys than the option of not providing a golf course, this will however depend on sustainable transport links provided and whether these are used. However if a golf course were not provided people may travel further to access a golf course.	☹	☹	☹	☺
15 To ensure that	A golf course is not likely to provide many employment opportunities	☺	☺	☺	☺

development maintains, supports and promotes a diverse employment base to serve the local and sub-regional economy					
16 To ensure development contributes to maintaining and enhancing the vitality and viability of Crawley town centre	It is unlikely that a golf course will have an effect on the vitality and viability of Crawley town Centre	☺	☺	☺	☺

**Option d is the most sustainable**