



ROCHFORD

**LOCAL DEVELOPMENT
FRAMEWORK:**

**Sustainability Appraisal/
Strategic Environmental
Assessment**

**Sustainability Appraisal
Technical Report**

Addendum

June 2011



Sustainability Appraisal incorporating Strategic Environmental Assessment of Rochford's Local Development Framework:

ROCHFORD CORE STRATEGY SUBMISSION DOCUMENT

Sustainability Appraisal Addendum

<i>date:</i>	<i>June 2011</i>
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SA of Rochford's Local Development Framework Core Strategy Sustainability Appraisal Report Addendum

CONTENTS

- 1. Introduction**
- 2. Summary Review of SA Alternatives**
- 3. Further appraisal of alternatives: general housing development locations**
- 4. Further appraisal of alternatives: general employment development locations**

APPENDICES

Appendix 1 - Detailed appraisal matrices (housing development locations)

Appendix 2 - Detailed appraisal matrices (employment development locations)

1. Introduction

Background

- 1.1 Rochford District Council's LDF Core Strategy Proposed Submission draft DPD was published for public consultation in September 2009 for a six week period. It was accompanied by a Sustainability Appraisal Report produced by consultants, Enfusion Ltd. The Proposed Submission Draft incorporated comments and representations from public consultation on the earlier versions of the plan and the sustainability appraisal undertaken throughout the plan-making process.
- 1.2 The Council submitted the Rochford District Core Strategy to the Secretary of State in January 2010. Since that time the document has been under examination by the Planning Inspectorate to determine whether it is sound and legally compliant. During the course of the examination, the change in government and subsequent changes in national policy have resulted in delays in the determination of the Core Strategy's soundness.
- 1.3 In light of the recent High Court Ruling *Save Historic Newmarket v. Forest Heath District Council*, Enfusion advised the Council that it would be prudent to undertake a review of the Core Strategy Sustainability Appraisal, ensuring compliance with the new case law on SEA arising from this ruling. Rochford District Council has subsequently requested that the issuing of a decision on the soundness of the Core Strategy be delayed to enable the Council to undertake such a review. The Planning Inspectorate has accepted this request and the Council commissioned Enfusion in May 2011 to undertake the work. This report is available for public consultation and any responses received may be further considered during the ongoing examination of the Core Strategy. Any comments should be sent to: planning.policy@rochford.gov.uk; or: Planning Policy, Council Offices, South Street, Rochford, Essex. SS4 1BW. The deadline for submitting comments is 5pm on 11 July 2011.
- 1.4 In response to the findings of the Forest Heath Case, this addendum SA report provides a summary of the alternatives considered throughout the production of the plan setting out the reasons for selecting /rejecting those alternatives. It also includes consideration of more detailed housing locations (than previously appraised). In addition to informing the Core Strategy, this work will also help to guide the further development of the Council's Site Allocations DPD.

Method

- 1.5 The same method of appraisal using the SA framework of objectives and decision-aiding questions for sustainable development in the Rochford District area was used as previously in the SA of the draft DPDs. All potential locations would need to comply with policies on sustainable design and construction, and climate change/energy requirements. All housing locations would contribute to meeting the SA objective relating to housing. Therefore, these SA objectives are common to all sites at the strategic appraisal level and were not considered in these SAs. Transport-related greenhouse gas emissions results correlate with the accessibility SA objective, so it is also noted that where a site performs poorly on accessibility, it is also likely to perform poorly on climate change.
- 1.6 A strategic approach was taken – appropriate to the Core Strategy level of plan-making and to minimise pre-empting the preparation of the Site Allocations DPD that will consider sites in more detail. Where particularly relevant, comment was made on comparative appraisal between sites and settlement areas. The appraisal was based on professional opinion, supported by evidence including the following documents:
- RDC SEA Scoping Report and Baseline(Essex County Council),
 - RDC Core Strategy Submission Document Habitats Regulations Assessment
 - RDC Core Strategy Submission Development Plan Document
 - RDC Core Strategy Submission Document SA Report
 - RDC Local Development Framework Allocations DPD Discussion and Consultation document (Regulation 25)
 - Maps, including Rochford District replacement Local Plan Proposals Map
- 1.7 Often the finding 'no significant effects identified' is given. This finding is used to denote that the development of the location is unlikely to have a significant effect on the SA objective in question. Whilst this is the case, there may be an overall cumulative effect from the sum of all developments, for example pressures on water supply and quality- any cumulative issues of significance were considered in Section 6 of the Sustainability Appraisal Submission report.

2. Summary review of alternatives assessment

- 2.1 The EU SEA Directive requires that a report shall be prepared "*...in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated*" (Article 5 (1)). Information to be included in the report includes "*an outline of the reasons for selecting the alternatives dealt with*" (Annex I (h)).
- 2.2 The recent Forest Heath high court ruling¹ and recommendations by DCLG in its report on the effectiveness of SEA and SA² have clarified and provided an additional interpretation of the EU SEA Directive. This section of the SA Report Addendum therefore seeks to provide a clear summary of the alternatives considered throughout the SA process and the reasons for selecting/rejecting those alternatives.

SA and Plan Making Alternatives 2006-2010

- 2.3 Whilst the SEA Directive does not define what a reasonable alternative is, UK practical guidance on SEA³ and SA/SEA⁴ advises that "realistic" alternatives should be considered. In 2010, the UK Government reported⁵ on a more efficient and effective use of SEA and SA in spatial planning. This recommended that "*Plan-making should generate well thought out and clearly articulated alternatives*" (recommendation 5) and that "*The appraisal should consider the extent to which options and policies will be effectively delivered on the ground to help avoid unrealistic assessment results*" (recommendation 8).
- 2.4 The EU SEA Directive requires that responsible authorities and the public should be given "*...an early and effective opportunity within appropriate timeframes to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme*" (Article 6 (2)).
- 2.5 The SA/SEA of the Rochford LDF Core Strategy has been an iterative and ongoing process with plan making since 2006. SA/SEA reports including the

¹ Save Historic Newmarket vs. Forest Heath District Council [2011] EWHC 606 (admin)

² DCLG, 2010 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/1513010.pdf>

³ ODPM 2005 A Practical Guide to the SEA Directive

<http://www.communities.gov.uk/publications/planningandbuilding/practicalguidesea>

⁴ PAS 2010 Sustainability Appraisal Advice Note <http://www.pas.gov.uk/pas/aio/627078>

⁵ DCLG, 2010 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/1513010.pdf>

consideration of alternatives have been prepared and made available for public consultation at each stage.

2.6 Alternatives (referred to as 'options' throughout the process) were developed initially during early 2006 and were subject to SA by Essex County Council's Environmental Assessment team. The Issues and Options and accompanying SA report were published for consultation in September 2006. The SA and the consultation helped to determine the preferred overall spatial strategy and preferred options, which were published for public consultation in May 2007. Table 2.1 summarises the options/alternatives considered, with an outline of the reasons for rejection where relevant. In this table "high" refers to a greater number of criteria with effects compared to "small" which refers to a lesser number of effects. The details of appraisal findings are set out in the main SA Report (September 2009).

Table 2.1: Summary of Approach to Alternatives Assessment

Options Considered and Appraised; Published Reports and Public Consultation	Reasoning for Progressing or Rejecting in Plan Making
September 2006 Issues and Options SA Report:	
<p>Strategic Option 1: The Green Belt & Strategic Gaps between Settlements</p> <p>Four alternatives considered: A- Relaxation of greenbelt policy. B - No strategic gaps, allowing coalescence in areas where the greenbelt performs only a token purpose. C - Continue its restrictive suite of policies for development within the greenbelt, in line with national guidance. D - Strategic gaps will be defined and protected by policy.</p>	<p>Options A and B were not taken forward due to the negative impacts they would have on the openness of the greenbelt and on the District as a whole. A combination of the other options was taken forward to reflect better sustainable development, and to promote a more sustainable strategic approach whilst minimising negative impacts on the District.</p>
<p>Strategic Option 2: Protection and Enhancement of the Upper Roach Valley</p> <p>Five alternatives considered: A - No country park allocation. B - No local landscape designations. C - No need for a further designation. D - A policy providing for protection/ enhancement and increased recreation opportunities. E - Identify land to be included in the Cherry Orchard Jubilee County Park and any further</p>	<p>Option A was rejected as it has the most detrimental impact and greatest proportion of negative impacts. In contrast options D and E have the greatest proportion of major positive and positive impacts.</p>

<p>proposed extensions.</p>	
<p>Strategic Option 3: Protection and Enhancement of Special Landscape Areas</p> <p>Seven alternatives considered: A - No local landscape designations. B - No coastal protection belt. C - No protection for the landscape. D - Freedom for agriculture, horticulture, equine uses, leisure and tourism uses whilst restricting employment and housing uses. E - Protection for the undeveloped coast. F - Protection for the three Special Landscape Areas. G - Protection of the Area of Historic Landscape and Ancient Woodlands.</p>	<p>Options A, B and C resulted in significant negative impacts and so were discounted. Option D shows a high uncertain result in the short medium and long term.</p> <p>Options E, F and G showed some major positive impacts and as such, a combination of Options E, F and G was taken forward.</p>
<p>Strategic Option 4: Housing numbers</p> <p>Four alternatives considered: A - Not attempting to meet the cascaded figure due to the restrictive development position with regard to the green belt. B - Relying on windfall development and urban intensification, to prevent the need for any green belt releases. C - Not allocating land to accommodate all the dwelling units and relying on a percentage of windfall development and urban intensification. D - Ensuring enough land is allocated to accommodate all of the cascaded figure for homes from the East of England Plan (RSS14) for the period 2001 to 2021.</p>	<p>Options A, B and C demonstrate a declining positive effect over time, with negative implications in the future. Option D has a positive to uncertain effect in all temporal extents.</p> <p>As such, and having regard to the requirements for Development Plan Documents, Option D was taken forward.</p>
<p>Strategic Option 5: General Development Locations</p> <p>Five alternatives considered: A - Greater dispersal to minor settlements, enabling possible regeneration of local facilities. B - Split the housing allocation evenly between the parishes (excluding Foulness), so that each area gets a small amount of housing. C - Develop a new settlement, well related to transport links and providing its own basic infrastructure. D - Focus solely on an expansion of one settlement, creating a significant urban expansion. E - Allocate the total number of housing units to the top and second tier settlements, to gain a smaller number of large sites which will</p>	<p>The September 2006 Issues and Options SA Report noted Options A and B have major negative effects in the short, medium and long term. It was also demonstrated that option C would result in increasingly negative impacts throughout time. Option D has a diverse range of impacts with both negative and positive effects whilst Option E has the greatest concentration of positive effects.</p> <p>As such, Option E was carried forward and subsequently developed having regard to the evidence base and the results of community involvement.</p>

<p>deliver the greatest amount of infrastructure improvements.</p>	
<p>Strategic Option 6: Affordable Housing</p> <p>Three alternatives considered: A - 30% of all new homes in the District be affordable on all sites. B - 50% of all new homes on sites in excess of 10 units will be affordable. C - Affordable housing will be set at 40% on sites specified in the Allocations DPD.</p>	<p>Option A has no impact on a number of the sustainability criteria; however there are positive impacts on criteria related to housing. Option B also has a high degree of no impact and uncertainty; however there is a greater concentration of positive impacts. Option C has a greater number of major positive impacts.</p> <p>The preferred option on affordable housing was taken forward having regard to the above, as well as issues of viability and the findings of additional evidence base documents.</p>
<p>Strategic Option 7: Accommodation for Gypsies and Travellers</p> <p>Two alternatives considered: A - No Gypsy or Traveller Site to be identified in the green belt. B - Accommodation needs for Gypsy and Travellers will be met by identifying in an existing residential area for a site and formally specifying it in the Allocations DPD.</p>	<p>Option A generally indicates no significant effects for the short-longer term with some minor negative impacts. The adoption of Option B would result in a greater amount of positive effects over the same time period.</p> <p>The preferred approach was developed having regard to the above, and other issues such as deliverability and land supply.</p>
<p>Strategic Option 8: Rural Exceptions</p> <p>Two alternatives considered: A - No rural exceptions policy. B - For windfall sites, 30% of all units will be required to be affordable. On rural exception sites all the units will be required to remain affordable in perpetuity.</p>	<p>Option A generally demonstrated strong neutral impacts, with some negative impact also. Option B in comparison had no negative impacts, but a greater degree of uncertainty.</p> <p>Having regard to the above, Option B was taken forward into the next iteration of the Core Strategy as a preferred option.</p>
<p>Strategic Option 9: Employment</p> <p>Four alternatives considered: A - No jobs figure to be included. B - Provide no details of the general locations C - Allocate a total number of jobs to be created in the District. It will specify areas within the District and their share of the overall total. D - Programme employment development in advance of new housing.</p>	<p>Options C and D displayed greater positive impacts and significantly lower no impact or negative effects than options A and B.</p> <p>Having regard to the above a combination of Options C and D was taken forward into the next iteration of the Core Strategy as a preferred option.</p>

<p>Strategic Option 10: Good Design and Design Statements</p> <p>Seven alternatives considered: A - No emphasis on design. B - No emphasis on lifetime housing. C - No emphasis on sustainable design. D - Prescriptive design guidance within policy to ensure uniform design and high standards. E - Push design statements to the fore of the planning application process. F - Require 25% of units provided on all housing sites over 10 units to meet a lifetime housing standard. G - Require, at least compliance with Code for Sustainable Homes the minimum standards.</p>	<p>Options A and B show mostly no impact with some negative impacts, whilst Option C indicates mostly no impact results alongside some positive effects.</p> <p>Options D and E exhibit a combination of mostly no impact effects, with major positive and negative impacts. Option F shows a very high no impact result with less major positive results than other options. Option G demonstrates a slightly lower no impact effect, as well as major positive and positive results.</p> <p>Consequently a combination of the above was taken forward to the next stage.</p>
<p>Strategic Option 11: Character of Place</p> <p>Three alternatives considered: A - No emphasis on character of place. B - Prescriptive design guidance within policy to ensure uniform design and high standards. C - Protection of the District's identity and ensuring that new development respects the local character.</p>	<p>Options A and B display a high level of no impact and negative results, with option B showing positive impacts too. Option C has the greatest concentration of major positive and positive effects - and consequently Option C was taken forward.</p>
<p>Strategic Option 12: Landscaping</p> <p>Three alternatives considered: A - No emphasis on landscaping. B - Continue determining landscaping details post-application and through enforcement work. C - Push landscaping to the fore of the planning application process and making them a prerequisite for determination for certain application types.</p>	<p>Options A and B show strong no impact results, with some negative and uncertain results. Option C also shows a high concentration of no impacts, but also major positives.</p> <p>As such, Option C was taken forward as the preferred option in the next iteration of the Core Strategy.</p>
<p>Strategic Option 13: Energy and Water Conservation</p> <p>Four alternatives considered: A - No emphasis on sustainable design. B - Deliver carbon-neutral development. C - Ensure new development promotes energy and water efficient buildings-also reduces the need to travel. D - Require compliance with the minimum standards, as set out in the Code for Sustainable Homes.</p>	<p>Options A, B and C all display strong no impact results, with some uncertain effects. Option D shows a higher quantity of no impact result, however, also shows major positive impacts.</p> <p>Option D was taken forward in order to achieve the most positive impacts.</p>
<p>Strategic Option 14: Renewable Energy</p>	<p>Option A has major negative and negative effects as well as no impact</p>

<p>Three alternatives considered: A - Push for any renewable energy uses in any location. B - Set a threshold for development size or number before requiring renewable energy to be included. C - Require all new housing and employment development to include renewable energy provision.</p>	<p>results. Option B shows a high no impact effect result, with no negative impacts. Option C indicates the same outcome as Option B but with additional benefits for provision of renewable energy.</p> <p>As such, Option C was taken forward as the preferred option in the next iteration of the Core Strategy.</p>
<p>Strategic Option 15: Compulsory Purchase</p> <p>Three alternatives considered: A - No compulsory purchase policy and attempt to use the legislation if required. B - Designate specific potential compulsory purchase sites. C - Set the framework to ensure that employment, residential, recreational and environmental enhancements for the district can be brought forward using compulsory purchase powers.</p>	<p>Option A has a high no impact and uncertain effect similar to Option B which also shows strong positive and major positive effects.</p> <p>Option C shows no uncertain impacts and shows high major positive and positive effects.</p> <p>As such, Option C was taken forward as the preferred option in the next iteration of the Core Strategy.</p>
<p>Strategic Option 16: Community, Leisure and Tourism Facilities</p> <p>A - Protect the green belt without providing any further guidance, leaving it up to central government in its review of Planning Policy Guidance Note 2. B - Reduce protection of the green belt to allow for community, tourism and leisure facilities. C - No policy on this issue, as it is currently not a major factor in the District. D - Provide a policy dealing with community, leisure and tourism proposals, which will provide clarity for developments, particularly within the Green Belt.</p>	<p>Option A shows a consistent positive effect, uncertain effect and no impact, with no negative implications. Options B and C show a higher degree of uncertainty and a higher negative element whereas Option D has completely uncertain implications.</p> <p>As such, Option A with elements of Option D were taken forward to the next iteration of the Core Strategy, in order to provide the greatest positive impact whilst accounting for local circumstances within a central government policy.</p>

3. Further appraisal of alternatives: general housing development locations

- 3.1 As illustrated above, the Council has considered the results of the SA of issues and options (alternatives) in its selection and rejection of alternatives for plan-making. The Sustainability Appraisal considered a range of issues considered to be of key importance to the development of the Core Strategy. This included consideration of housing numbers and general locations for development (Strategic Options 4 and 5). The SA found that Option E, the allocation of housing to the top and second tier settlements to gain a smaller number of large sites would have the most positive effects of all the options.
- 3.2 In light of the Forest Heath ruling, it was decided to further develop this appraisal, considering the more detailed locations for development within individual top and second tier settlements. The recent publication (in February 2010) of the LDF Allocations DPD Discussion and Consultation Document has also enabled a further consideration of the realistic locations for development, as it incorporates the findings of the call for sites process and Strategic Housing Land Availability Assessment (SHLAA).
- 3.3 Detailed appraisals of housing locations were undertaken for each of the top and second tier settlements and Canewdon, with full details provided in Appendix 1. In addition, Rawreth has been assessed as a location, as response to the Core Strategy consultation had suggested this could be considered as an alternative to other Rayleigh locations. The reasons for selecting or rejecting these locations are summarised below.

Table 3.1: Housing development options for Rochford District

Housing development options for Rochford District
Housing development options for Rochford/Ashingdon: <u>Location 1: West Rochford</u> Location 2: South Rochford Location 3: East Rochford Location 4: North Ashingdon <u>Location 5: South East Ashingdon</u> <u>Location 6: East Ashingdon</u>
Locations 1 (West Rochford) was selected it is a sustainable location, particularly in terms of accessibility, economy and employment, and balanced communities. In addition, the location relates well to London Southend Airport and proposed employment growth there, is not subject to significant environmental constraints which would inhibit development, and is of a scale capable of accommodating

other infrastructure, including a new primary school which would have wider community benefits. The location performs well to the proposed balanced strategy, and, due to its location in relation to Southend and the highway network, would avoid generating traffic on local networks for non-local reasons.

Location 5 (South East Ashingdon) and Location 6 (East Ashingdon) were selected as they are well located in relation to King Edmund Secondary School, which amongst accessibility benefits also means that there are opportunities for important, required improvements to the school to accompany additional development in these locations to the benefit of the wider community. Location 5 would also allow for a significant amount of development to be accommodated in a manner which does not entail development projecting out into the open countryside.

Location 2 was not selected as it has the potential to engender coalescence with Southend, performed less well in sustainability terms compared with West Rochford and would be less likely to deliver community benefits than development in South East and East Ashingdon.

Location 3 was not selected as it was not considered as sustainable a location as West Rochford. There are greater environmental constraints to the east of Rochford, including Natura 2000 and Ramsar sites. Development to the east of Rochford has the potential to be affected by noise from London Southend Airport, given its relationship to the existing runway. Whilst a small quantum of development may be accommodated within this general location avoiding land subject to physical constraints, such an approach is less likely to deliver community benefits, and would necessitate the identification of additional land, diluting the concentration of development and thus reducing the sustainability benefits of focussing development on larger sites. Location 3 is also unlikely to aid the delivery of improvements to King Edmund School. Furthermore, it would generate traffic on local networks for non-local reasons, i.e. traffic to Southend would be likely to be directed through the centre of Rochford, including through the Conservation Area.

Location 4 was not selected due to its poor accessibility and distance from service and facilities, particularly when compared to alternatives. It was less likely to engender improvements to King Edmund School than Locations 5 and 6.

Housing development options for Rayleigh:

Location 7: West Rayleigh (North of London Road, Rayleigh)

Location 8: East Rayleigh

Location 9: South West Rayleigh

Location 10 : North Rayleigh

Location 11: South/ South East Rayleigh

Location 12: Rawreth village

Location 7 was selected as the preferred location for housing development in Rayleigh, as the location provides opportunities for the co-location of development

with the adjacent proposed employment area. Due to its location on the west side of Rayleigh it will also result in less air pollution and congestion in Rayleigh Town centre, as traffic will not need to travel through the centre. It corresponds well to the proposed balanced strategy in the Core Strategy, and relates well to Chelmsford and Basildon, avoiding generating traffic on local networks for non-local reasons.

Location 8, 11, and 9 are all likely to have more of an impact on air pollution and transport in the town centre; locations 10 and 11 could lead to coalescence with Hullbridge and Southend-on-Sea Borough respectively. Locations 8, 10, and 11 perform less well in terms of the proposed balanced strategy, in that they either relate better to Southend than Chelmsford / Basildon, and traffic to the latter centres would be drawn through local networks and town centre. Location 8 was also likely to have negative effects on landscape, being located close to the Upper Roach Valley and Hockley woods. The Sustainability Appraisal found that the West Rayleigh location would have the most positive effects of all the sites, and it performed particularly well on the objectives relating to balanced communities, economy and employment.

Location 12 is detached from Rayleigh, and whilst it relates well to Basildon and Chelmsford centre, it would lead to isolated development poorly served by services and facilities and performs poorly in terms of its sustainability.

Housing development options for Hockley/Hawkwell:

Location 13: West Hockley

Location 14: South Hawkwell

Location 15: Northeast Hockley (incl North Hockley)

Location 13 (West Hockley) was selected as this general location benefits from good access to the centre of Hockley and the local services and facilities located there including education, health and public transport hubs, as opposed to Location 15 where these local services and facilities may be less accessible. There is also a proposed Sustrans route in proximity to this general location. It is well related to recreational opportunities within Hockley Woods and the wider Upper Roach Valley. Development in this location would therefore have a positive impact on sustainability in terms of accessibility and healthy and safe communities. This location also has the potential to utilise existing previously developed land in the locality (although this will be dependent on the allocation of land within this location, if this location were to be included in an adopted Core Strategy), as well as opportunities to create a defensible Green Belt boundary. It relates well in terms of the balanced strategy, as the west of the settlement has a strong relationship with Chelmsford and Basildon.

Location 14 (South Hawkwell) would positively contribute to the balanced strategy as it is well related to London Southend Airport, which is a key economic driver in the area, and the strategic highways network and Southend to the south. There are opportunities to identify sites in this general location which would not project into the open countryside, particularly given the proximity of the Upper Roach Valley (which is

a Special Landscape Area), and the potential to create a defensible Green Belt boundary. Development may therefore have a positive impact on economy and employment, balanced communities and landscape. This general location is well related to recreational opportunities as there is a leisure centre situated in south Hawkwell, and areas of public open space are in proximity to it (such as Cherry Orchard Jubilee Country Park and Hockley Woods). A Sustrans route is also proposed in proximity to this general location.

Location 15 (North East Hockley including North Hockley) has a relationship with Chelmsford, Basildon and Southend, and would subsequently direct traffic either through Hockley centre to the south west / west, or along Ashingdon Road to the south, which in conjunction with other general locations identified (such as east Ashingdon and south east Ashingdon) would have a significant impact on the local highway network. In effect it would generate traffic on local networks for non-local reasons, and have a negative impact on the balanced strategy. It is not as well related to local recreational opportunities as west Hockley and south Hawkwell, or the proposed Sustrans route. Furthermore depending on the sites taken forward, this general location may not be well related to local services and facilities in Hockley centre, and as opposed to Locations 13 and 14, it has greater potential to project into the open countryside.

Housing development options for Hullbridge:
South West Hullbridge

Hullbridge is recognised as a distinct settlement with its own community and therefore housing needs, and development at this settlement corresponds towards the balanced approach to housing distribution supported by sustainability appraisal. Hullbridge is subject to significant constraints to the North West and North East that inhibit development. Development to the South West would relate well to Rayleigh and to links towards Basildon and Chelmsford centre without encouraging the generation of additional traffic on local networks for non-local reasons. It also an opportunity for infrastructure improvements that would serve the wider community.

Housing development options for Canewdon:
South Canewdon

Canewdon is recognised as a distinct settlement with its own community and therefore housing needs, and development at this settlement corresponds towards the balanced approach to housing distribution supported by sustainability appraisal. The location is not subject to significant environmental or physical constraints. In addition, the proposed location sets to provide good accessibility to Rochford town centre and would minimise the impact on traffic passing through the village centre.

Although Canewdon is defined as a tier 3 settlement, the proposed development performs well in relation to the balanced strategy, and would be able to retain the community cohesion of the village.

Housing development options for Great Waking:
West Great Waking

Great Waking is recognised as a distinct settlement with its own community and therefore housing needs, and development at this settlement corresponds towards the balanced approach to housing distribution supported by sustainability appraisal. The location is not subject to significant environmental constraints which would inhibit development, and is of a scale capable of accommodating other infrastructure, including youth and community facilities which would have wider community benefits.

The proposed development to the West relates well to Southend and would therefore minimise additional traffic on local networks for non-local reasons. The location is relatively close to the existing centre and associated services.

4. Further appraisal of alternatives: general employment development locations

4.1 Strategic Option 9, described in section 2, considered strategic options around the provision of employment and considered whether to allocate a total number of jobs and whether to specify employment areas within the District. This was progressed into the Preferred Options and Submission DPD, and a number of strategic employment locations were nominated. These locations and realistic alternatives to the locations have been subject to further sustainability appraisal, with full details provided in Appendix 2. The reasons for selecting or rejecting these locations are summarised below.

Table 4.1: Housing development options for Rochford District

Employment development options for Rochford District
<p><u>London Southend Airport</u> <u>West Rayleigh</u> South Rochford (east of Airport)</p>
<p>Reason for selection/ rejection: London Southend Airport is recognised as a having the potential to be a key economic catalyst within the sub-region. The approach of focussing additional employment development around London Southend Airport is supported by sustainability appraisal.</p> <p>The allocation of current Green Belt land to the west of Rayleigh was recommended by the Employment Land Study and supported by Sustainability Appraisal.</p> <p>South Rochford (east of Airport) could include the expansion of the existing industrial estate (Purdeys), but the release of additional Green Belt land in this location is not supported by the Employment Land Study. Whilst this location is in proximity to London Southend airport, the area to the east of the airport is disconnected from the airport itself by the existing railway line. Furthermore, there is limited amount of land to the east compared to the north and west of the airport. In addition, development to the south of Rochford has the potential to engender the coalescence of Rochford and Southend.</p> <p>London Southend Airport and West Rayleigh were therefore selected as the preferred options for employment allocations and South Rochford was rejected.</p>

Other options that were not considered realistic:
Wallasea Island North Ashingdon
<p>Reason for rejection: Whilst there is a small amount of existing employment land in Wallasea Island, the area is subject to significant physical constraints and the Employment Land Study does not recommend Green Belt land be allocated for employment within this location.</p> <p>There is no existing employment allocation to the north of Ashingdon, and the Employment Land Study does not recommend it as a location for the consideration of the release of Green Belt for employment.</p>

Appendix 1- Detailed appraisal matrices (housing development locations)

Housing development options for Rochford/Ashingdon:

Location 1: West Rochford

SA Objective	Commentary	Score
1. Balanced communities	The quantum of development that can be delivered in this location provides sufficient economies of scale to fund/develop facilities required by the community.	++
2. Healthy and safe communities	Potential to link to Upper Roach Valley Recreation Area (encompassing Hockley Woods and Cherry Orchard Country Park) and established cycleways, public footpaths and bridleways.	+
3. Housing		
4. Economy & employment	Proximity to and potential for good links to London Southend Airport and surrounding employment, as well as good rail links to other employment opportunities. Development at this location may also contribute to regeneration/economic development at Rochford Town Centre.	++
5. Accessibility	Location has good links to existing community areas and facilities. Good accessibility to employment due to relationship with London Southend Airport employment area; also proximal to town centre and walking distance to Rochford train station. Positive effects through reducing out-commuting and opportunities for commuting by walking and cycling .	++
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	Development in this location has the potential to urbanise Hall Road, a gateway to Rochford Town Centre Conservation area, however this could be mitigated through sensitive design.	?
8. Landscape & townscape	Within South Essex Coastal Towns Landscape Character Area ¹ . No Significant effects identified.	0
9. Climate change & energy		

10. Water	No significant effects identified.	0
11. Land & Soil	Location includes both grade 1 and grade 2 agricultural land ⁱⁱ .	-
12. Air Quality	Some potential to further exacerbate Air Quality issues in Rochford Town Centre, however a significant proportion of traffic will instead travel south to Southend-on-Sea using Cherry Orchard Way, rather than routing through Rochford Town Centre.	?
13. Sustainable Design & construction		

Summary: Development in this location is supported through Sustainability Appraisal. Major positive effects were identified for Economy and Employment and Accessibility, due to proximity to Rochford Town Centre, its train station, and London Southend Airport employment area. Positive effects identified for health due to potential links to recreation (Upper Roach Valley). As with many locations appraised across the District, development at this location will have negative effects on land and soil, due to its location on grade 1 and 2 agricultural land.

Location 2: South Rochford

SA Objective	Commentary	Score
1. Balanced communities	The quantum of development that can be delivered in this location provides sufficient economies of scale to fund/develop facilities required by the community.	++
2. Healthy and safe communities	Location has potential for good links to Thames Gateway Greenway proposal 18.	+
3. Housing		
4. Economy & employment	Potential for good links with London Southend Airport Employment site, however access to site difficult due to presence of railway line.	+
5. Accessibility	Further from the Town Centre and railway station than the West and East Rochford locations, but still proximal- also close to	+

	London Southend Airport employment site.	
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	Within South Essex Coastal Towns Landscape Character Area. Development at this location is likely to cause coalescence with settlements in Southend –on-Sea Borough, therefore negative effects on landscape & townscape.	-
9. Climate change & energy		
10. Water	No significant effects identified.	0
11. Land & Soil	Located on grade 1 agricultural land.	-
12. Air Quality	Could further exacerbate Air Quality issues in Rochford Town Centre through increasing traffic on Southend Road.	?
13. Sustainable Design & construction		

Summary: Development at this location would have some positive effects, due to its proximity to London Southend Airport employment area and the Town Centre. However the train line acts as a barrier, and the Town Centre is not within easy walking distance. Negative effects identified for land and soil as located on grade 1 agricultural land.

Location 3: East Rochford

SA Objective	Commentary	Score
1. Balanced communities	The quantum of development that can be delivered in this location provides sufficient economies of scale to fund/develop facilities required by the community. Would also contribute to regeneration in Rochford.	++
2. Healthy and safe communities	Development location within flight path of London Southend Airport, therefore potential for noise pollution. Parts of this location lies within the airport public safety zone, so potential negative effects on community safety. Negative effects identified through increased traffic congestion in Rochford Town Centre (causing disruption, noise pollution and air pollution, with implications for public health.	-
3. Housing		
4. Economy & employment	Location relates well to Purdeys Industrial Estate, however the Estate is unlikely to generate significant levels of new employment, and is not identified as a specific location for employment growth.	+
5. Accessibility	Location is proximal to town centre, although further from train station than the West Rochford Location. It is also further from the London Southend Airport Employment Area and would require most traffic to route through Rochford Town Centre to head south to the Airport or to Southend.	+
6. Biodiversity	Development at this location has the potential for negative effects on the Crouch and Roach Estuaries SPA and Ramsar site due to recreational disturbance from the new residential community ⁱⁱⁱ .	?
7. Cultural Heritage	Development at this location will increase traffic flows through Rochford Town Centre Conservation area, with potential negative effects through increased pollution and noise disturbance.	?
8. Landscape & townscape	The Crouch and Roach Farmland Landscape Character (LCA) area lies to the east of Rochford, and is a more sensitive LCA than for locations to the south and west of Rochford.	?
9. Climate change & energy		

10. Water	Potential for adverse effects on water quality due to location close to the Crouch and Roach Estuaries. Some parts of this location are prone to flood risk, although it is likely that development could be accommodated outside of the flood risk zone.	?
11. Land & Soil	Located on grade 1 agricultural land.	-
12. Air Quality	Any significant development at this location is likely to further exacerbate Air Quality issues in Rochford Town Centre, as most traffic will need to travel through the Town Centre ^{iv} .	-
13. Sustainable Design & construction		

Summary: Positive effects were identified for this location for Economy and Employment and accessibility, however these were not considered major, as for some other locations. Negative effects were identified due to noise and safety concerns relating to the location on the London Southend Airport flight path and the requirement for most traffic to route through Rochford Town Centre, increasing congestion, noise and air pollution. Potential effects on biodiversity and water were noted due to the location close to the Crouch and Roach Estuary SPA and Ramsar site.

Location 4: North Ashingdon

SA Objective	Commentary	Score
1. Balanced communities	No significant effects identified.	0
2. Healthy and safe communities	No significant effects identified.	0
3. Housing		
4. Economy & employment	No significant effects identified.	0
5. Accessibility	Location is a significant distance from Town Centres, railway stations, employment and community facilities, so is unlikely to encourage sustainable transport.	-

6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	The Crouch and Roach Farmland Landscape Character (LCA) area lies to the north of Ashingdon, and is a more sensitive LCA than for locations to the south and west of Rochford.	?
9. Climate change & energy		
10. Water	No significant effects identified.	0
11. Land & Soil	Located on Grade 3 Agricultural land, so no significant impact identified.	0
12. Air Quality	No significant effects identified.	0
13. Sustainable Design & construction		

Summary: No significant effects were identified for most SA objectives, however the location was found to have negative effects on accessibility, as it is located a significant distance from services and facilities, including employment opportunities. The location is also in a sensitive landscape area. No positive effects were identified.

Location 5: South East Ashingdon

SA Objective	Commentary	Score
1. Balanced communities	No significant effects identified.	0
2. Healthy and safe communities	No significant effects identified.	0

3. Housing		
4. Economy & employment	No significant effects identified.	0
5. Accessibility	Well located in relation to King Edmund Secondary School, and reasonable access to Rochford Town Centre for services and employment.	+
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	Whilst it is within the Crouch and Roach Farmland Landscape Character (LCA) area (a more sensitive landscape area than Essex Coastal Towns Landscape Character Area) this location is better connected to the existing urban form than all other locations considered in the District. It will have a minimal effect on the green belt as there is already development of the North, south and west, therefore the effect on landscape is considered to be a major positive.	++
9. Climate change & energy		
10. Water	No significant effects identified.	0
11. Land & Soil	Located on Grade 2 Agricultural land.	-
12. Air Quality	May further exacerbate Air Quality issues in Rochford Town Centre, as some traffic will need to travel through the Town Centre ^v , however this is less of an issue for this location, as north and west-bound traffic won't need to travel through Rochford Town Centre.	?
13. Sustainable Design & construction		

Summary: Positive effects were identified for accessibility and major positive effects for landscape (due to the location's good relationship with the existing urban form and lack of obvious incursion into the greenbelt). There is some potential to exacerbate air quality issues in Rochford Town Centre, however there are alternative routes to the west and north, so this is less likely than for locations further south.

Location 6: East Ashingdon

SA Objective	Commentary	Score
1. Balanced communities	No significant effects identified.	0
2. Healthy and safe communities	No significant effects identified.	0
3. Housing		
4. Economy & employment	No significant effects identified.	0
5. Accessibility	Well located in relation to King Edmund Secondary School and shops and services on Ashingdon Road. Good access to bus services on Ashingdon Road.	+
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	The Crouch and Roach Farmland Landscape Character (LCA) area lies to the east of Ashingdon, and is a more sensitive LCA than for locations to the south and west of Rochford.	?
9. Climate change & energy		
10. Water	No significant effects identified.	0
11. Land & Soil	Located on Grade 2/3 Agricultural land.	-

<p>12. Air Quality</p>	<p>May further exacerbate Air Quality issues in Rochford Town Centre, as some traffic will need to travel through the Town Centre^{vi}, however this is less of an issue for this location, as north and west-bound traffic won't need to travel through Rochford Town Centre.</p>	<p>?</p>
<p>13. Sustainable Design & construction</p>		

Summary: No significant constraints were identified at this location. It is reasonably well-located, close to shops, the secondary school, services and transport (bus) services in Ashingdon.

Housing development options for Rayleigh:

Location 7: West Rayleigh (North of London Road, Rayleigh)

SA Objective	Commentary	Score
1. Balanced communities	The quantum of development that can be delivered in this location provides sufficient economies of scale to fund/develop facilities required by the community, including a primary school, public open space and other community facilities.	++
2. Healthy and safe communities	Location has potential for good links to Thames Gateway Greenway proposal 13, providing opportunities for recreation, also the potential for inclusion of a significant public park, creating a buffer to the A1245.	++
3. Housing		
4. Economy & employment	Location is within close proximity to Imperial Park Industrial Estate and the proposed employment area (office development) west of Rayleigh. There are potential opportunities to encourage mixed-use development at this location and to relocate businesses from Rawreth industrial estate. Well located to Basildon and Chelmsford for employment opportunities.	++
5. Accessibility	Site is a significant distance from Rayleigh Train Station and town centre, although the land area/development quantum is of sufficient size to encourage the enhancement of bus services (when combined with the proposed west Rayleigh employment area). A potential highway link between Rawreth Lane and London Road may provide more public transport opportunities.	+
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	Within South Essex Coastal Towns Landscape Character Area. A development of the scale envisaged may be more prominent in this location due to the obvious extension into the green belt (and lack of defensible green belt boundaries). However it is noted that the Core Strategy is proposing a new green buffer to the west of this development.	-
9. Climate change & energy		

10. Water	Some areas within this location are within flood zone 3, however it is likely that development can be accommodated outside of the flood prone area.	?
11. Land & Soil	Located on Grade 3 Agricultural land-no significant impact identified.	0
12. Air Quality	Development on this scale could exacerbate air quality in Rayleigh through increasing traffic (it is noted that Council is in the process of declaring an Air Quality Management Area (AQMA) at Eastwood Road and High Street Rayleigh). However, due to the relationship of Rayleigh to Basildon/Chelmsford, this location to the west will have less of an effect on air quality than sites located to the east and south (all traffic from the east and south will route through Rayleigh centre). Location also near Rawreth industrial estate AQMA, however this site is proposed for redevelopment (to less polluting employment land uses than present), so this is unlikely to be a concern.	?
13. Sustainable Design & construction		

Summary: The size of the land available in this location, combined with proposals for an employment area at West Rayleigh create economies of scale that support new community and transport infrastructure. This wouldn't be possible at a number of alternative Rayleigh locations (due to coalescence and land ownership constraints). The location has good potential to connect with Thames Gateway Greenway proposal 13, enhancing health benefits. Negative effects on air quality were identified, due to existing air quality issues in Rayleigh Town Centre, however one of the benefits of this location is that traffic heading west and north to Basildon and Chelmsford would not need to travel through the centre of Rayleigh, hence minimising the effect of increased air pollution and congestion that is likely to result in developing to the east of Rayleigh.

Location 8: East Rayleigh

SA Objective	Commentary	Score
1. Balanced communities	It is not clear whether there is sufficient land available at this location to accommodate the proposed allocation for Rayleigh, given the constraint of the Upper Roach Valley recreation area.	?

<p>2. Healthy and safe communities</p>	<p>Development is within close proximity to the Upper Roach Valley recreation area and Hockley Woods SSSI, therefore positive benefits for health. Potential to connect with Thames Gateway Greenway proposal 16.</p> <p>Potential health effects from increased air and noise pollution, as significant traffic likely to be routed through Rayleigh town centre.</p>	<p>+</p> <p>+</p>	<p>?</p>
<p>3. Housing</p>			
<p>4. Economy & employment</p>	<p>This location is further from employment opportunities than a number of other locations in Rayleigh, although it may also benefit from closer access to Hockley.</p>	<p>+</p>	
<p>5. Accessibility</p>	<p>The location is a similar distance to the town centre/ Railway station as location 7; however there may also be the opportunity to enhance public transport services, given the quantum of development possible. The railway line poses a constraint to access from the location, and much of the traffic from this location would consequently need to travel through Rayleigh Town Centre.</p>	<p>+</p>	<p>?</p>
<p>6. Biodiversity</p>	<p>The location is close to Hockley Woods SSSI and its development has the potential for negative effects on the site through increasing recreational use and disturbance. Through increasing traffic on the B1013, there is also the potential for increased air pollution, which may negatively affect the SSSI. This is likely to be more of a concern for this site (than West Hockley, for example) due to the size of allocation required at Rayleigh.</p>		<p>?</p>
<p>7. Cultural Heritage</p>	<p>Development at this location will increase traffic flows through Rayleigh Conservation Area, with potential negative effects through increased pollution and noise disturbance.</p>		<p>?</p>
<p>8. Landscape & townscape</p>	<p>Development in this location could potentially infringe upon the Upper Roach Special Landscape Area (SLA). A smaller SLA (Hockley Woods) is to the south of this location and could be adversely affected by development.</p> <p>Significant development at the site also has greater potential to lead to coalescence of Rayleigh and Hockley.</p>	<p>--</p>	
<p>9. Climate change & energy</p>			
<p>10. Water</p>	<p>No significant effects identified.</p>	<p>0</p>	

11. Land & Soil	Located on Grade 3 Agricultural land-no significant impact identified.	0
12. Air Quality	Located on the south side of the railway line, development on this scale could exacerbate poor air quality in Rayleigh, as much of the traffic from this location would consequently need to travel through Rayleigh Town Centre. This would have a negative effect on the proposed Air Quality Management Area in Rayleigh.	-
13. Sustainable Design & construction		

Summary: The location has good potential to connect to existing green spaces and the green grid, enhancing health benefits. Negative effects on air quality were identified, due to existing air quality issues in Rayleigh Town Centre, and the requirement for traffic to route through the Town Centre, where there is already an Air Quality Management Area (AQMA).

A key issue identified for this site is its potential impact on special landscape areas and potential contribution towards the coalescence of Hockley and Rayleigh. Development also has the potential to impact adversely on the Hockley Woods SSSI and the Council has advised that the area of land available for development in this location may not be sufficient to achieve the quantum of development required in Rayleigh, without infringing on the Upper Roach Valley recreation area.

Location 9: South West Rayleigh

SA Objective	Commentary	Score
1. Balanced communities	The quantum of development that can be delivered in this location provides sufficient economies of scale to fund/develop facilities required by the community.	++
2. Healthy and safe communities	The location has access to open space areas to the South of Rayleigh. Potential health effects from increased air and noise pollution, if significant traffic routed through Rayleigh town centre.	+ ?
3. Housing		
4. Economy & employment	Location within proximity of Rayleigh town centre for employment opportunities and opportunities to contribute to the regeneration of the town centre	++

5. Accessibility	Location is within good proximity to Rayleigh Train Station and the services, employment and facilities available in Rayleigh Town centre. It is noted that there are Highways concerns around connecting the location to the A127.	+	?
6. Biodiversity	No significant effects identified.	0	
7. Cultural Heritage	Development at this location will increase traffic flows through Rayleigh Conservation Area, with potential negative effects through increased pollution and noise disturbance.		?
8. Landscape & townscape	Development at this location is likely to have less of an effect on landscape than at other locations in Rayleigh as it is bound by the existing urban area, railway line and the A127.	0	
9. Climate change & energy			
10. Water	No significant impact identified	0	
11. Land & Soil	Located on grade 3 agricultural land. The site's steep topography may present difficulties.	-	
12. Air Quality	Development at this location has the potential to exacerbate poor Air Quality (An AQMA is proposed for Rayleigh). No access to the A127 from this site, therefore traffic would be directed to the town centre.	-	
13. Sustainable Design & construction			

Summary: There are a number of positive benefits to development at this location, in particular its proximity to Rayleigh train station and town centre, allowing opportunities to contribute to the regeneration of the town centre. There are also landscape benefits, as the site is bound by the existing urban area, the railway line and the A127. However it is noted that Highways concerns have been raised, as there would be no direct access available to the A127, and traffic would therefore be routed through the town centre and the proposed AQMA. With the scale of development proposed for Rayleigh, this could have significant negative effects on air quality.

Location 10: North Rayleigh

SA Objective	Commentary	Score
1. Balanced communities	The quantum of land that can be delivered in this location provides sufficient economies of scale to fund/develop facilities required by the community, including a primary school, public open space and other community facilities.	++
2. Healthy and safe communities	Reasonable proximity to Upper Roach Valley recreation area.	+
3. Housing		
4. Economy & employment	Site is within good proximity to existing and proposed employment opportunities at West Rayleigh, although further from the town centre.	+
5. Accessibility	The location is further (than other Rayleigh locations) from Rayleigh Train Station and services available in the town centre.	0
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	Within the South Essex Coastal Towns Landscape Character Area that is least sensitive to development. However, a development of the quantum envisaged for Rayleigh could have negative effects on local landscapes. Development may be more prominent in this location due to the obvious extension into the green belt (and lack of defensible green belt boundaries). Coalescence with Hullbridge is also a potential problem with this location.	-
9. Climate change & energy		
10. Water	No significant effects identified.	0
11. Land & Soil	Located on Grade 3 Agricultural land-no significant impact identified.	0

<p>12. Air Quality</p>	<p>Development on this scale could exacerbate air quality in Rayleigh through increasing traffic. However, due to the relationship of Rayleigh to Basildon/Chelmsford, this location to the north will have less of an effect on air quality than sites located to the east and south.</p> <p>Location also near Rawreth industrial estate AQMA, however this site is proposed for redevelopment (to less polluting employment landuses than present), so this is unlikely to be a concern.</p>	<p>?</p>
<p>13. Sustainable Design & construction</p>		

Summary: This location doesn't perform as well in the sustainability appraisal as other Rayleigh sites- it is further from Town Centre services, will create an obvious extension into the green belt (with no defensible boundary), and has the potential to cause coalescence with Hullbridge. It also doesn't have the advantages of some of the other sites in terms of access to employment or recreational spaces. The call for sites exercise undertaken by the Council also indicated potential ownership issues with this location, therefore deliverability may be questionable.

Location 11: South /South East Rayleigh

SA Objective	Commentary	Score
1. Balanced communities	It is not clear whether there is sufficient land available at this location to accommodate the proposed allocation for Rayleigh, given the constraints of coalescence with settlements to the south.	?
2. Healthy and safe communities	Location has potential for good links to Thames Gateway Greenway proposal 16 and has potential to link to Upper Roach Valley Recreation Area. Good access to public open space areas south of Rayleigh. Potential health effects from increased air and noise pollution, if significant traffic routed through Rayleigh town centre.	+ + ?
3. Housing		
4. Economy & employment	Location close to Brook Road Industrial Estate, and employment opportunities to the south.	+
5. Accessibility	Much of this location is a similar distance to the town centre/ Railway station as the North of London Road and South West Rayleigh locations .	+
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	Location is likely to direct traffic through Rayleigh Conservation Area and near Rayleigh Mount- increased air and noise pollution may have negative effects on the conservation setting.	?
8. Landscape & townscape	Within South Essex Coastal Towns Landscape Character Area. Further development at this location will lead to coalescence of Rayleigh with settlements to the south in Southend-on-Sea Borough.	-
9. Climate change & energy		
10. Water	Parts of this location are located within Flood Zone 3, potentially further reducing the footprint available for development.	?

11. Land & Soil	Located on Grade 3 Agricultural land-no significant impact identified.	0
12. Air Quality	Development on this scale could exacerbate air quality in Rayleigh through increasing traffic in the town centre.	-
13. Sustainable Design & construction		

Summary: Land to the south of Rayleigh is constrained by the A127, A1015 and existing development, including industrial development at Brook Road, as well as potential flooding issues. It therefore does not have the advantage of some of the other locations in terms of creating sufficient economies of scale to fund infrastructure and community services. Development in this location will also lead to coalescence between Rayleigh and settlements to the south.

Location 12: Rawreth village

SA Objective	Commentary	Score
1. Balanced communities	Development of the scale envisaged for the west of Rayleigh would have an adverse effect, through overwhelming the existing small village community.	-
2. Healthy and safe communities	No significant effect identified.	0
3. Housing		
4. Economy & employment	Minimal employment within the village, but it is located within proximity to Rayleigh and Wickford, and road links to employment centres at Chelmsford/Basildon. Development would promote economic opportunities for Rawreth village, but would overwhelm existing facilities (appraised under objective 1).	+
5. Accessibility	This location performs poorly on accessibility due to the small size of the settlement and lack of access to shops and services. Development at this location would be heavily car dependent.	--

6. Biodiversity	No significant effects indentified.	0
7. Cultural Heritage	No significant effects indentified.	0
8. Landscape & townscape	Effects on landscape/townscape are likely to be more significant at this location as a housing development of any significant size would overwhelm the existing settlement. Development would need to occur in the open green belt, counter to the development strategy.	--
9. Climate change & energy		
10. Water	No significant effects indentified.	0
11. Land & Soil	Location is within Grade 3 Agricultural land-no significant effect identified.	0
12. Air Quality	No significant effects indentified.	0
13. Sustainable Design & construction		

Summary: Development of housing at the scale envisaged for Rayleigh at this location is likely to have major negative effects on the SA objectives relating to accessibility and landscape/townscape. Even if a smaller volume of housing were proposed, the location would be heavily car-reliant, with access to schools, shops and services requiring a drive to Rayleigh or Wickford. It is noted that the sustainability of a 'new town' was considered at the Issues and options stage and discounted. Development in this location would also have adverse effects on the greenbelt and could overwhelm the existing settlement and its historic buildings.

Housing development options for Hockley/Hawkwell:

Location 13: West Hockley

SA Objective	Commentary	Score	
1. Balanced communities	Some opportunity to enhance existing services, but not considered significant given the size of the allocation for Hockley (50 homes).	0	
2. Healthy and safe communities	Location well-situated in terms of access to recreational opportunities (Upper Roach Valley, including Hockley Woods and Cherry Orchard Country Park), and potential to link to Sustrans cycle route.	++	
3. Housing			
4. Economy & employment	Effects on economy not considered significant. Employment opportunities available in Hockley Centre and Rayleigh.	0	+
5. Accessibility	Well located for education facilities (Hockley primary school adjacent), town centre and rail and potential to link to Sustrans cycle route.	++	
6. Biodiversity	Hockley Woods SSSI is located in West Hockley vicinity. Development may increase recreational pressure on the SSSI and traffic on the B1013, which may increase air pollution in the vicinity, however the size of the allocation is unlikely to cause a significant effect. (Wooded areas are also located outside of the SSSI boundary and could be adversely affected by development in this location; however this can be avoided through careful site planning.	?	
7. Cultural Heritage	No significant effects identified.	0	
8. Landscape & townscape	Negative local landscape effects possible, due to a predominance of wooded landscape in the West Hockley vicinity. Development may result in vegetation removal. There are potential benefits to locating south of Railway line, as a defensible green belt boundary can be maintained.	?	+
9. Climate change &			

energy		
10. Water	No significant effects identified.	0
11. Land & Soil	Land in this vicinity is generally Grade 3 agricultural land or woodland. Assuming no development of woodland, impact would not be significant. There is also some brownfield land within this location that may come forward.	0
12. Air Quality	As above, will increase air pollution along B1013- with potential effects on biodiversity (this effect considered under biodiversity). No further significant effects identified.	0
13. Sustainable Design & Construction		

Summary: There are a number of benefits to development at this location, including good accessibility to Hockley centre and primary school, and the ability to create a defensible green belt boundary. Whilst there is the potential for adverse effects on biodiversity/landscape due to the location close to the Hockley Woods SSSI and surrounding remnant woodland, an allocation of up to 50 homes (as proposed in the Core Strategy) could be accommodated without adverse effects.

Location 14: South Hawkwell

SA Objective	Commentary	Score	
1. Balanced communities	Some opportunity to enhance existing services, which may be considered significant given the size of the allocation for Hawkwell (175 homes).	?	
2. Healthy and safe communities	Location relates well to Sustrans cycle route.	+	
3. Housing			
4. Economy & employment	Hockley centre is reasonably close and location is proximal to London Southend Airport employment area. Provides an opportunity for regeneration/economic enhancement in Hawkwell.	0	+
5. Accessibility	Location is further from rail links and services in Hockley than the west Hockley location. Opportunities for sustainable transport links. Location relates well to Sustrans cycle route.	?	
6. Biodiversity	No significant impact identified.	0	
7. Cultural Heritage	No significant impact identified.	0	
8. Landscape & townscape	There is the potential to contain development within an existing built envelope without eroding the openness of the greenbelt, however there is also potential for loss of a wooded area.	+	?
9. Climate change & energy			
10. Water	No significant impact identified.	0	
11. Land & Soil	Land in this vicinity is generally Grade 3 agricultural land. No significant effects identified.	0	
12. Air Quality	No significant impact identified.	0	
13. Sustainable Design &			

construction		
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Summary: Development at this location provides an opportunity for regeneration and the meeting of local housing need in Hawkwell, without impacting adversely on either local landscape or the greenbelt. Accessibility to services and employment is not as good as for West Hockley, but Hockley centre is reasonably close and location is proximal to London Southend Airport employment area.

Location 15: North East Hockley (including North Hockley)

SA Objective	Commentary	Score	
1. Balanced communities	Some opportunity to enhance existing services, but not considered significant given the scale of existing settlement.	0	
2. Healthy and safe communities	No significant effects identified.	0	
3. Housing			
4. Economy & employment	Employment opportunities available in Hockley Centre. Unlikely to have significant economic effects.	+	
5. Accessibility	North east Hockley location is a similar distance from rail links and services in Hockley as the west Hockley location, however North Hockley is further. Road access to Southend may be problematic, as traffic would need to travel through Hockley centre or Ashingdon road.	+	?
6. Biodiversity	Woodland areas to the North of Hockley may be adversely affected, although it may be possible to accommodate without negative effects on biodiversity.	?	
7. Cultural Heritage	No significant effects identified.	0	
8. Landscape & townscape	Development in this location does not provide opportunities for defensible green belt boundaries, however given the small size of the allocation, significant effects are unlikely.	?	
9. Climate change & energy			
10. Water	No significant effects identified.	0	
11. Land & Soil	Land in this vicinity is generally Grade 3 agricultural land. No significant effects identified.	0	
12. Air Quality	No significant effects identified.	0	

13. Sustainable Design & construction		
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Summary: The appraisal shows that generally development in this location would be acceptable, however the location doesn't have the advantages of the other 2 Hockley/Hawkwell locations in providing an opportunity for a defensible green belt, it also poses potential highways accessibility issues, therefore the other locations may be preferred from this perspective.

Housing development options for Hullbridge:

Location 16: South West Hullbridge

SA Objective	Commentary	Score	
1. Balanced communities	Development of 250-500 homes at this location will help to sustain the existing community and will support existing community services.	+	
2. Healthy and safe communities	Located close to Sustrans cycle route and facilities available in and around Hullbridge.	+	
3. Housing			
4. Economy & employment	No significant effect for employment as there is limited employment available in Hullbridge, but settlement is close to other centres of employment. Positive effects for economy as development will help to support existing retail and services in Hullbridge.	0	+
5. Accessibility	Housing development at Hullbridge won't benefit from the same access to services and employment as development in Rayleigh, Hockley and Rochford/Ashingdon, however it is recognised that there is housing need in Hullbridge. Development to the South West of the existing village will place new housing within close proximity to existing shops, the primary school and transport links in Hullbridge village centre.	-	+
6. Biodiversity	Impacts on the Crouch and Roach Estuary SAC, including recreational impacts will need to be considered in further detail at site allocations stage (through the HRA of the Site Allocations document), although effects are considered unlikely if development is located in South West of settlement, away from the estuary.	?	
7. Cultural Heritage	Potential impacts on local archaeology- would need to be subject to survey at more detailed stages of development.	?	
8. Landscape & townscape	Development is likely to have local landscape effects, and is located within the more sensitive Crouch and Roach Farmland landscape character area. The cumulative effect of up to a further 500 homes may further contribute to this effect. Impacts should be further considered at site allocations stage.	?	

9. Climate change & energy		
10. Water	No significant effects identified.	0
11. Land & Soil	Location is within Grade 3 Agricultural land-no significant impact identified.	0
12. Air Quality	Potential impact on Lower road junction- air quality and congestion effects.	?
13. Sustainable Design & construction		

Summary: Whilst Hullbridge is not as well located in terms of access to employment and services as Rayleigh, Hockley and Rochford/Ashingdon, development at the settlement will help to meet the villages housing requirements. Development to the south west of the village is supported by the sustainability appraisal as it will place new housing within close proximity to existing shops, the primary school, transport links in Hullbridge Village Centre and links to Basildon/Chelmsford/Rayleigh and where effects on landscape will be minimised. Effects on biodiversity (specifically the Crouch estuary) are unlikely at this location, but should be considered in the Habitats Regulations Assessment of the Site Allocations document.

Housing development options for Canewdon:

Location 17: South Canewdon

SA Objective	Commentary	Score
1. Balanced communities	Development of 60 homes at this location is likely to help sustain the existing community and support existing community services.	+
2. Healthy and safe communities	No significant effects identified.	0
3. Housing		
4. Economy & employment	<p>Negative effects for employment as there is limited employment available in Canewdon itself- residents would mostly need to travel to other centres (Rochford, Rayleigh, Southend-on-Sea) to work.</p> <p>However, positive effects are likely for the local economy as development will help to support existing retail and services in Canewdon.</p>	- +
5. Accessibility	<p>The location (South of Canewdon) has good access to local shops and services and Canewdon Primary school, also to Ashingdon however access to employment and wider services will require travel to Rochford/ Hockley.</p> <p>A location in South Canewdon will help direct traffic away from the narrow centre.</p>	- +
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	Development of this scale (60 homes) is likely to have local landscape effects; however there is potential to minimise any effects through choosing a site where a defensible green belt boundary can be created. Location is within the more sensitive Crouch and Roach Farmland landscape character area.	?
9. Climate change & energy		

10. Water	No significant effects identified.	0
11. Land & Soil	Located on Grade 3 Agricultural land-no significant impact identified.	0
12. Air Quality	No significant effects identified.	0
13. Sustainable Design & Construction		

Summary: Canewdon is not as well located in terms of access to employment and services, when compared with the larger villages of Hullbridge and Great Wakering. However, new housing development at the settlement will help to meet the village's housing requirements. It will also support existing services and support the viability of the community. Within the settlement, south Canewdon is considered an appropriate development location, with good access to local services and the primary school - it will also divert traffic away from the narrow centre of the village.

Housing development options for Great Wakering:

Location 18: West Great Wakering

SA Objective	Commentary	Score
1. Balanced communities	Development of 250 homes at this location is likely to help sustain the existing community and will support existing community services.	+
2. Healthy and safe communities	Some local facilities available, including the local leisure centre.	+
3. Housing		
4. Economy & employment	Housing development in this location will help to support existing retail and services in Great Wakering. The location is also close to employment opportunities in Southend-on Sea and Shoeburyness.	+
5. Accessibility	Whilst Great Wakering is further from Rochford Districts main settlements to the west, it is in good proximity to employment, services and retail located at Shoeburyness and Southend-on – Sea. Local retail services and sports facilities are available within walking/cycling distance in Great Wakering.	+
6. Biodiversity	Great Wakering is within proximity to sites of European nature conservation importance (The Crouch and Roach SPA/Ramsar site and Foulness SPA/Ramsar site), however given the scale of development and distance involved, negative effects are considered unlikely. This will be considered in further detail in the HRA of the Site Allocations document.	?
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	Some local effects on landscape/townscape possible, depending on site/s chosen for development, although location within less sensitive South Essex Coastal Towns landscape area. Development should be connected well to the existing settlement, so as to avoid coalescence with Shoeburyness.	?
9. Climate change & energy		

10. Water	No significant effects identified.	0
11. Land & Soil	Location is within Grade 3 Agricultural land-no significant impact identified.	0
12. Air Quality	No significant effects identified.	0
13. Sustainable Design & Construction		

Summary: Housing development in this location will help support housing need in the east of the District and will also help to support the viability of the existing settlement, including community services. The location is well-placed to benefit from employment opportunities and services at Southend-on Sea/Shoeburyness. There is some potential for increased pressures on European designated habitats through increasing the population in this area, however given the relatively small scale of development (250 homes) this is considered unlikely. Development at this location should also avoid coalescence with Shoeburyness through ensuring the chosen sites are well connected to Great Wakering.

Appendix 2- Detailed appraisal matrices (employment development locations)

Options for employment sites:

Location E1: London Southend Airport

SA Objective	Commentary	Score
1. Balanced communities	The development of the London Southend Airport employment area is likely to have positive economic flow-on effects for the town of Rochford.	+
2. Healthy and safe communities	Opportunities to link to the Cherry Orchard Jubilee Country Park on the west side of Cherry Orchard Way.	+
3. Housing		
4. Economy & employment	The co-location of employment land with existing development at the airport site will help to create a strong regional driver for employment development.	++
5. Accessibility	The location has excellent access to public transport services, in particular it is well-located to Rochford train station. It is also located adjacent to Southend Airport Railway station. There are also opportunities to improve walking and cycling routes and buses, through integrating with the South Essex Rapid Transport (SERT) proposals and pedestrian/cycle links with development to the west of Rochford.	++
6. Biodiversity	Effects on biodiversity are being addressed through the Joint Area Action Plan and site-level appraisal, however no significant strategic-level constraints have been identified.	0
7. Cultural Heritage	No significant effects identified	0
8. Landscape & townscape	Located within South Essex Coastal Towns landscape Character Area, and surrounding an existing airport/industrial location, however development of this scale will have an impact on the surrounding landscape. Mitigation (green corridors, buffers etc) will be required.	-
9. Climate change & energy		
10. Water	Employment land can be large users of water. Rochford treatment works are at capacity, so augmentation of existing services is likely to be required. There are areas of flood risk within this location, but it is	?

	considered that development can avoid these areas.	
11. Land & Soil	Much of the location is non-agricultural land, however there is also Grade 1 agricultural land in the vicinity. Employment development of this scale is likely to include loss of agricultural land.	-
12. Air Quality	Development of this scale may have some adverse effects, especially during construction and this should be considered through appropriate phasing and development management.	?
13. Sustainable Design & construction		

Summary: The co-location of further employment development with London Southend Airport provides positive benefits for communities, economic development and employment. The accessibility of the location by public transport is excellent, and due to its co-location with existing development, there are opportunities to enhance green links and buffers to help minimise the adverse effects of a development of this scale.

Location E2: West Rayleigh

SA Objective	Commentary	Score
1. Balanced communities	The development of an employment area at West Rayleigh is likely to have positive economic flow-on effects for the town of Rayleigh.	+
2. Healthy and safe communities	Location has potential for good links to Thames Gateway Greenway proposal 13, providing opportunities for recreation,	+
3. Housing		
4. Economy & employment	The development of employment land in this location will help improve employment opportunities for the west of Rochford District and improve Rayleigh's economy.	+
5. Accessibility	Location is a significant distance from Rayleigh Train Station and town centre, although the land area/development quantum is of sufficient size to encourage the development of bus services/ SERT (when combined with the proposed west Rayleigh housing development). Good access to strategic highways.	+

6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	Located within South Essex Coastal Towns landscape Character Area, which is less sensitive than other landscape areas, however development of this scale will have an impact on the surrounding landscape. Mitigation (green corridors, buffers etc) would be required.	-
9. Climate change & energy		
10. Water	Some areas within this location are within flood zone 3, however it is likely that development can be accommodated for outside of the flood prone area.	?
11. Land & Soil	Land is predominantly grade 3 agricultural land. There is some opportunity for use of brown field land.	0
12. Air Quality	Depending on phasing, the development of this site could exacerbate the Existing Air Quality Management Area (AQMA) at Rawreth Industrial estate (Council are seeking alternative uses for this site to replace the existing polluting industries- this would render the AQMA redundant). However positive for Rayleigh Town centre, as most traffic won't travel through the centre.	?
13. Sustainable Design & construction		

Summary: No significant negative effects were identified in developing this location for employment land. The co-location of the site with proposed residential land at West Rayleigh (north of London Road) would further enhance positive effects for accessibility through encouraging a mix of uses neighbouring each other. This will help to encourage sustainable transport through allowing residents the opportunity to walk and cycle to work. It would also provide further opportunities for enhanced green spaces and services (especially bus services) through increasing developer funding and improving viability through increased patronage of services.

Location E3: South Rochford (east of Airport)

SA Objective	Commentary	Score
1. Balanced communities	The development of this location as an employment area is likely to have positive economic flow-on effects for the town of Rochford.	+
2. Healthy and safe communities	Location has potential for good links to Thames Gateway Greenway proposal 18.	+
3. Housing		
4. Economy & employment	The development of employment land in this location will help improve employment opportunities in Rochford District and improve Rochford's economy. The location of employment land near to existing development at the nearby airport site will help to create a strong regional driver for employment development.	++
5. Accessibility	The location performs similarly to the London Southend airport site, however access to the airport is more difficult due to the presence of the railway line.	++
6. Biodiversity	No significant effects identified.	0
7. Cultural Heritage	No significant effects identified.	0
8. Landscape & townscape	The Crouch and Roach Farmland Landscape Character (LCA) area lies to the east of Rochford, and is a more sensitive LCA than for locations to the south and west of Rochford. Development of the scale envisaged likely to have an adverse effect on landscape, as with the other locations. Additionally, development of this site will lead to further negative effects through coalescence with settlements in Southend on Sea.	--
9. Climate change & energy		
10. Water	Employment land can be large users of water. Rochford treatment works are at capacity, so augmentation of existing services is likely to be required.	?
11. Land & Soil	Located on grade 1 agricultural land.	-

12. Air Quality	Could further exacerbate Air Quality issues in Rochford Town Centre through increasing through traffic. Uncertain effect.	?
13. Sustainable Design & construction		

Summary: This location performs similarly to the London Southend Airport location, however it does not benefit from the same synergies and opportunities as the Airport site, being located further from the existing airport and severed from the site by the railway line. Additionally, development of this location is likely to lead to major negative effects on landscape through contributing to coalescence with Southend-On-Sea.

ⁱ The RDC SEA Scoping report Baseline Information Profile (2007-2008) explains the sensitivities of the various Landscape Character areas in the District: The South Essex Coastal Towns has a medium sensitivity; Crouch & Roach Farmland a Medium-High Sensitivity and the Dengie and Foulness Coast a High-medium sensitivity.

ⁱⁱ Rochford District Council SEA Scoping Report and Baseline. Essex County Council. 2006

ⁱⁱⁱ Rochford District Council Habitats Regulations Assessment.

^{iv} Traffic headed south to Southend and the Airport, west to Rochford/Ashingdon, Hockley, Rayleigh and beyond will all be required to head through Rochford Town Centre.

^v Traffic headed south to Southend and the Airport, west to Rochford/Ashingdon, Hockley, Rayleigh and beyond will all be required to head through Rochford Town Centre.

^{vi} Traffic headed south to Southend and the Airport, west to Rochford/Ashingdon, Hockley, Rayleigh and beyond will all be required to head through Rochford Town Centre.