

Appendix E

Sustainability appraisal of alternatives

The tables below provide an explanation of the notation used in the options assessment matrix.

Major Positive Impact	The policy strongly supports the achievement of the SA Objective.	++
Positive Impact	The policy partially supports the achievement of the SA Objective.	+
Neutral/ No Impact	There is no clear relationship between the policy and / or the achievement of the SA Objective or the relationship is negligible.	0
Positive and negative outcomes	The option has a combination of both positive and negative contributions to the achievement of the SA Objective, e.g. a short term negative impact but a longer term positive impact.	+/-
Uncertain outcome	It is not possible to determine the nature of the impact as there may be too many external factors that would influence the appraisal or the impact may depend heavily upon implementation at the local level. More information is required to assess the impacts.	?
Negative Impact	The policy partially detracts from the achievement of the SA Objective.	-
Major Negative Impact	The policy strongly detracts from the achievement of the SA Objective.	--

L-T	Effects likely to arise in 10-25 years of Core Strategy implementation
M-T	Effects likely to arise in 5-10 years of Core Strategy implementation
S-T	Effects likely to arise in 0-5 years of Core Strategy implementation
D	Direct effects.
I	Indirect effects.
R	Effects are reversible
IR	Effects are irreversible
H/M/L	High, medium or low certainty of prediction
C	Potential to have cumulative effect with other proposals or plans on this objective

Table 1 Sustainability appraisal of CS7 and Alternative 1

	CS7: The Amount of Housing Required		Alternative 1: Adopted policy 2011	
	The Council has an objectively assessed housing need of 13,550 dwellings at 677 dwellings per annum between 2011 and 2031. Proposes 360 fewer residential dwellings than considered originally in the adopted Core Strategy 2011 between 2011 and 2027. The revised policy proposes 2,710 dwellings between 2027 and 2031 beyond the adopted Core Strategy plan period, which would be 2,800 dwellings if the adopted policy was rolled forward to 2031.		The Regional Spatial Strategy gave the Council a target to allocate land to accommodate at least 15,400 additional residential units between 2001 and 2021. This is equivalent to 770 dwellings per year. However, the Council revised this figure to 700 dwellings per annum through the adopted Core Strategy (14,000 from 2001 to 2021) in the light of additional local evidence.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
ET1 To improve air quality	- S, M –LT D R M C	Fewer residential dwellings are proposed within the revised Policy CS7, which may result in less traffic issues at key roads and junctions depending on the exact location of new development, than the adopted policy. However, the overall projected growth of housing numbers still suggests significant increase in traffic in the areas of the new developments and on the main roads that lead to the city centre and/or to the main employment hubs. <i>Although the use of sustainable modes of transport is encouraged through other policies in the Core Strategy (e.g. DM16), opportunities should be sought to allocate land in a way that the new residential units are near community facilities/employment hubs.</i>	- - S, M –LT D/I R M C	More dwellings were proposed to be built per year which would result in more traffic generation both during construction and during operation. As result, it is anticipated that under alternative 1 air quality will deteriorate with some significant negative effects in the vicinity of AQMAs.
ET2 To conserve soil resources and quality	- - S, M –LT D I R M C	Although the number of the residential dwellings to be built has decreased, the envisaged housing growth suggests that good quality agricultural land and open countryside will be lost as a result of substantial urban extension. The use of windfall brownfield sites in urban Ipswich may reduce the impact by allocating more residential dwellings on previously developed land.	- S, M –LT D I R M C	The effects from the implementation of alternative 1 will be similar to those identified for CS7 as both options envisaged significant amount of housing to be built on greenfield land. Alternative 1 has the potential to minimise the negative effects on soil resources through phasing of housing sites and initial focus on PDL.
ET3 To reduce waste	- S, M –LT D/I I R M	It is anticipated that the target to deliver at least 13,550 additional residential dwellings in the borough will generate waste from construction as well as household waste from the growing numbers of new residents. <i>Opportunities should be sought to encourage recycling within the new housing developments. Facilities should be provided to encourage reuse/recycling.</i>	- - S, M –LT D/I I R M	Alternative 1 will result in more waste generation from construction and operation as a result of more residential dwellings to be built per year.
ET4 To reduce the effects of traffic upon the environment	- S, M –LT D R M C	Whilst the focus of the policy is not to tackle traffic issues, the significant amount of new residential units has the potential to result in pressure on key junctions/roads (on the A12/A14 at Copdock, Seven Hills Interchange and the Orwell Bridge) in peak hours depending on the exact location of development and the provision of appropriate level of public transport to serve the new neighbourhoods. <i>Mitigation measures to encourage sustainable modes of transport are included in other policies of the Core Strategy DM15, DM16, and DM17.</i>	- - S, M –LT D R M C	Alternative 1 will result in more significant negative effects due to a higher number of housing proposed which will result in more traffic generated during construction and operation.
ET5 To improve access to key services for all sectors of the population	+/- M –LT D R M C	Negative effects may occur where housing is allocated outside the boundary of IP-One area due to the distance of new development from the town centre and most community facilities. In addition, access issues may occur due to congestion on the roads that connect the NF with Ipswich town centre, however, CS10 requires the provision of facilities on site. Where housing is delivered within IP-One area, it is anticipated that it will contribute to the achievement of the SA objective as the key services will easily accessible by all modes of transport.	+/- M –LT D R M C	Similar negative effects are likely to occur under alternative 1 as it also envisaged development in the NF at a later stage of the plan. Positive effects are likely to occur where housing is delivered within IP-One area as the key services will easily accessible by all modes of transport.
ET6 To limit and adapt to climate change	- S, M –LT I R M	Although the number of residential dwellings has decreased, the policy envisages the use of greenfield land at an earlier stage of the plan due to the limited amount of PDL sites. Consequently, there is potential for increased flood risk due to change in land use. Changes in land use may affect the generation of water run-off at local scale. Additionally, new homes will use more energy which will result in increase of greenhouse emissions. <i>Therefore, it will be beneficial to use SuDS to reduce flood risk and manage run-off as required by Core Strategy Policy DM4. .</i>	- S, M –LT I R M	The effects from the implementation of the policy will be similar to those identified in the revised option with occurrence of the negative effects on climate change at a later stage after 2021 due to phased land take at the NF. Due to more housing anticipated to be built, it is likely that under this alternative the overall CO2 emissions will increase and more land take will be required.

	CS7: The Amount of Housing Required		Alternative 1: Adopted policy 2011	
	The Council has an objectively assessed housing need of 13,550 dwellings at 677 dwellings per annum between 2011 and 2031. Proposes 360 fewer residential dwellings than considered originally in the adopted Core Strategy 2011 between 2011 and 2027. The revised policy proposes 2,710 dwellings between 2027 and 2031 beyond the adopted Core Strategy plan period, which would be 2,800 dwellings if the adopted policy was rolled forward to 2031.		The Regional Spatial Strategy gave the Council a target to allocate land to accommodate at least 15,400 additional residential units between 2001 and 2021. This is equivalent to 770 dwellings per year. However, the Council revised this figure to 700 dwellings per annum through the adopted Core Strategy (14,000 from 2001 to 2021) in the light of additional local evidence.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
ET7 To protect and enhance the quality of water features and resources and reduce the risk of flooding	+/- S,M –LT D R M C	There are areas within the borough boundary that are prone to flooding, particularly those near the Waterfront. Therefore <i>development should be directed to areas of lower flood risk through the Sequential Test process and highly vulnerable development should not be permitted unless there are no alternative sites available.</i> <i>In addition, the construction of new developments should ensure that the quality of watercourses does not deteriorate through the use of SuDS (See policy DM4).</i> Positive effects on water quality may occur where contaminated land is remediated before commencement of construction works.	+/- S,M –LT I/D R M C	Whilst there is a higher environmental risk to affect the water courses where more construction will occur, on the whole it is considered that the effects will be similar to the revised policy. Although more land take will be required to meet the housing target, a higher percentage is allocated to brownfield land which will have indirect benefits with regards to reduced flood risk.
ET8 To conserve and enhance biodiversity and geodiversity , including favourable conditions on SSSIs, SPAs and SACs	+/- S,M –LT D R M C	Ipswich contains a number of sites of international, national, regional and local importance for nature conservation. Policy CS7 identifies the Northern Fringe as a potential area of new development but that is not considered to pose any environmental risks upon the designated sites located in the southern part of the borough. However, net biodiversity loss is anticipated with regards to loss of greenfield land. <i>Opportunities should be sought to enhance the habitats where new development will occur. See policies CS4, DM5 and DM31.</i>	0 S,M –LT D R M C	Alternative 1 has a focus on the use of PDL with less impact on biodiversity due to prioritised use of brownfield land. The priority to use greenfield land is envisaged for the period of the plan after 2021.
ET9 To conserve and enhance the historic environment, heritage assets and their settings	- S,M –LT D R M C	There are a great number of designated heritage assets (e.g. listed buildings) within the borough boundary and the majority of them are concentrated in the town centre. Negative effects are likely to occur where new developments are located near designated heritage assets. <i>If any new development/windfall sites are located in close proximity to designated heritage assets, opportunities should be sought to enhance the condition of existing assets, particularly the ones 'at risk'. See policy DM5.</i>	- S,M –LT D R M C	Since the majority of listing buildings and heritage assets are located in urban Ipswich, alternative 1 has more potential to affect the designated assets as PDL sites are more likely to be within the central urban area.
ET10 To conserve and enhance the quality and local distinctiveness of landscapes and townscapes	+/- S,M –LT D R M C	It is anticipated that some development will be located on currently undeveloped agricultural fields which may result in significant change of the landscape character in the more rural areas of the borough. Positive effects will occur in areas where new housing developments will contribute to the regeneration of the town centre with direct benefits on townscape character. <i>Whilst the primary focus of the policy is not to address landscape issues, it is important to ensure that the gaps between Ipswich and neighbouring villages are maintained to preserve local distinctiveness.</i>	+/- S,M –LT D R M C	The likely effects from the implementation of the policy will be similar to those identified with the preferred option.
HW1 To improve the health of those most in need	+ M –LT D/I R M	There is a relationship between the provision of decent housing and health. Health deprivation is currently higher than national average and it is anticipated that the policy may contribute to the achievement of the SA objective through additional number of residential units and supply of affordable housing.	+ M –LT D/I R M	The likely effects from the implementation of the policy will be similar to those identified with the preferred option.
HW2 To improve the quality of life where people live and encourage community participation	+ M –LT D/I R M	The quality of life will be partially improved through the provision of decent housing. The policy on its own is not considered to have any direct effect on community participation.	+ M –LT D/I R M	The likely effects from the implementation of the policy will be similar to those identified with the preferred option.
ER1 To reduce poverty and social exclusion	+ M –LT I/D R M	The policy may contribute indirectly to the achievement of the SA objective in the long term through the provision of decent homes for the growing population of Ipswich. The issues related to the growing number of homeless people may be tackled through the provision of affordable housing. Central, southwest, and southeast areas are ranked as most deprived. The allocation of land for housing will contribute to the redevelopment/regeneration of the areas. Therefore it is considered that effect will be positive.	+ M –LT I/D R M	The policy contributes to the achievement of the SA objective through allocation of land for housing development primarily on PDL (71%) until 2022 in more central areas of Ipswich with some potential to redevelop already deprived areas. I think this should be the same as the revised policy commentary and score. Ok I agree.
ER2 To offer everybody the opportunity for	+ S	The primary focus of the policy is not to address employment issues as this is addressed in other policies	+ S	Alternative 1 will result in similar effects as the revised policy with slight increase in job opportunities due to higher number of

	CS7: The Amount of Housing Required		Alternative 1: Adopted policy 2011	
	<p>The Council has an objectively assessed housing need of 13,550 dwellings at 677 dwellings per annum between 2011 and 2031. Proposes 360 fewer residential dwellings than considered originally in the adopted Core Strategy 2011 between 2011 and 2027. The revised policy proposes 2,710 dwellings between 2027 and 2031 beyond the adopted Core Strategy plan period, which would be 2,800 dwellings if the adopted policy was rolled forward to 2031.</p>		<p>The Regional Spatial Strategy gave the Council a target to allocate land to accommodate at least 15,400 additional residential units between 2001 and 2021. This is equivalent to 770 dwellings per year. However, the Council revised this figure to 700 dwellings per annum through the adopted Core Strategy (14,000 from 2001 to 2021) in the light of additional local evidence.</p>	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
rewarding and satisfying employment	D/I R L	in the Core Strategy. However, it is considered that in the short term it will contribute to the achievement of the SA objective through increased employment opportunities directly related to the construction of new homes and infrastructure.	D/I R L	residential units and potentially wider infrastructure network required. However the difference between the options is considered to be insignificant as these are considered to be short term effects.
ER3 To help meet the housing requirements for the whole community	+ S, M –LT D R M	<p>The implementation of the policy will contribute to the achievement of the SA objective through the provision of housing (allocating a minimum 5,909 dwellings net by 2031). The policy clearly states that the future delivery of housing will be in accordance with the housing needs identified in the recently updated Strategic Housing Market Assessment.</p> <p>Housing land supply may limit the opportunities to deliver the full amount of projected housing figures despite the initiatives to consider future opportunities beyond the Borough boundaries.</p> <p><i>Opportunities should be sought the reuse the great number of vacant buildings (around 600 are long term vacant).</i></p>	+/- M –LT D/I R M	The policy envisages the supply of a significant amount housing to meet the needs of the growing population. The provision of more residential dwellings suggests higher proportion of affordable housing which will directly contribute to the achievement of the SA objective. However, alternative 1 may also result in oversupply of flats and does not reflect the objectively assessed needs.
ER4 To achieve sustainable levels of prosperity and economic growth throughout the plan area	+ M –LT D/I R M	The SA objective will be indirectly achieved through meeting the demand of housing and providing opportunities for the borough to grow and develop. Investment in residential developments will create a number of temporary jobs but also will attract further inward investment by becoming a better place to live.	- M –LT D/I R M	The alternative has the same housing led focus as the revised policy. The allocation of the NF for housing is at a later stage of the plan. The phasing of housing sites is likely to result more difficulties to deliver infrastructure within new development with long periods of construction works which may result in limited opportunities for investment.
ER5 To support vital and viable town, district and local centres	+ S, M –LT D/I R M C	In general terms it is anticipated that housing will be allocated in both the urban areas (e.g. the Waterfront) and in the peripheral parts of the borough (Northern Fringe). The SA objective will be achieved as it is considered that the increase of new residents will have a positive effect on existing town and district centres. New Local and District Centres will be created in the Northern Fringe to meet the needs of the new residents.	+ S, M –LT D/I R M C	The alternative is likely to have similar effects as those identified for the preferred option.
ER6 To encourage efficient patterns of movement in support of economic growth	+/- S, M –LT D I R M	The location and amount of new housing will have a direct effect on patterns of movement across the borough. Some positive effects are likely to occur where housing sites are allocated in the urban central areas within walking distance from the main community facilities and employment hubs. The housing allocated in the periphery of the borough (e.g. IP065) may detract from the SA objective due to the distance to key services and limited public transport options.	+/- S, M –LT D I R M	The alternative is likely to have similar effects as those identified for the preferred option.
ER7 To encourage and accommodate both indigenous and inward investment	+ M –LT D/I R M	Same as ER4.	- M –LT D/I R M	Same as ER4.
CL1 To maintain and improve access to education and skills for both young people and adults	+ S, M –LT D/I R M C	Whilst the preferred option itself does not refer to education needs, it states that the phasing of housing sites will be informed by infrastructure delivery, which includes sites for additional primary schools in the borough. However, other policies address education needs. CS15 has a specific focus on education provision and states that new primary schools provision will be needed to meet the demands of growth. Where housing is allocated in the town centre (IP-One area) a new primary school (IP258) is envisaged to accommodate the amount of population growth. In addition, housing allocated in IP-One area will benefit from the close location of Suffolk New College and University Campus Suffolk. CS10 provides details of all education facilities to be built in the Northern Fringe to achieve the SA objective.	+ S, M –LT D/I R M C	Whilst the provision of more housing will require the additional provision of education facilities, overall it is considered that the alternative is likely to have similar effects as those identified for the preferred option.
CD1 To minimise potential opportunities for crime and anti-social	- S D	Crime rates are higher than national average with high records of organised crime and hate crime amongst others. The growth in population may result in an	- S D	More residential dwellings may result in higher crime rates in the short term particularly in the areas already ranked as most deprived in IP-One area.

	CS7: The Amount of Housing Required		Alternative 1: Adopted policy 2011	
	The Council has an objectively assessed housing need of 13,550 dwellings at 677 dwellings per annum between 2011 and 2031. Proposes 360 fewer residential dwellings than considered originally in the adopted Core Strategy 2011 between 2011 and 2027. The revised policy proposes 2,710 dwellings between 2027 and 2031 beyond the adopted Core Strategy plan period, which would be 2,800 dwellings if the adopted policy was rolled forward to 2031.		The Regional Spatial Strategy gave the Council a target to allocate land to accommodate at least 15,400 additional residential units between 2001 and 2021. This is equivalent to 770 dwellings per year. However, the Council revised this figure to 700 dwellings per annum through the adopted Core Strategy (14,000 from 2001 to 2021) in the light of additional local evidence.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
activity	R L C	increase in thefts in the short term but as this not the only factor that contributes to increase of crime levels, certainty of prediction is rather low. <i>Mitigation measures would include safety by design principles incorporated in new developments.</i>	R L C	<i>Mitigation measures would include safety by design principles incorporated in new developments.</i>

Table 2 Sustainability appraisal of CS10 and Alternative 1

	CS10: Ipswich Northern Fringe		Alternative 1: Adopted policy 2011	
	The revised policy envisages the development of the whole Northern Fringe (NF) to meet the housing needs assessed in the 2012 SHMA. Originally only 1000 new dwellings were expected to be delivered by 2021; the revised policy is now looking at 3,500 new dwellings for the overall period until 2031.		Land at the Northern Fringe of Ipswich, north of Valley Road / Colchester Road and between Henley Road in the west and Tuddenham Road in the east, will form the main source of supply of housing land in Ipswich after 2021. Due to the limited availability of previously developed land in the rest of the town, the delivery of 1,000 dwellings will be expected to commence prior to 2021 on land to the east of Henley Road and south of the railway line. The indicative capacity at the Northern Fringe identified in the 2010 SHLAA is about 4,500 dwellings.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
ET1 To improve air quality	- - S, M –LT D/I R M C	Air quality may deteriorate as a result of the envisaged urban extension to the north of the town centre. Although measures to encourage the use of sustainable modes of transport are included in the Core Strategy, travel by private car could remain the main mode of transport to work due to there being no employment land allocated on the site. The indicative number of dwellings is 3,500; hence it is anticipated that negative effects on air quality are likely to occur in the north part of the borough. <i>Increase in public transport provision (buses) and more frequent train services to the area may reduce car use.</i>	- - S, M –LT D/I R M C	The negative effects associated with air pollution will be anticipated to occur at a later stage due to commencement of construction work in the most northern parts of the area after 2021. However in the long term the indicative capacity is looking at a 1,000 more residential dwellings within the plan period with increased potential for congestion issues on the key roads. Therefore, it is considered that the overall effect will be negative.
ET2 To conserve soil resources and quality	- S, M –LT D IR M C	The site consists of 195ha of good quality agricultural land; 1/3 of the land will be allocated for open space and a country park, which will partially contribute to the achievement of the SA objective but <i>opportunities may be sought to allocate land for allotments to make use of the good quality agricultural land.</i>	- - S, M –LT D IR M C	The alternative is likely to result in negative effects associated with land take and loss of good quality agricultural land. It is anticipated that significant negative effects will occur at a later stage due to commencement of development of the whole Northern Fringe area after 2021. However in the long term the indicative capacity is looking at a 1,000 more residential dwellings within the plan period with larger area required to meet the housing needs. Therefore, it is considered that the overall effect will be negative.
ET3 To reduce waste	- S, M –LT D/I IR M	Although the indicative capacity of the NF has been reduced to 3,500 new homes, it is anticipated that the development will result in negative effects associated with waste generation due to a significant amount of new households in the borough. <i>Opportunities should be sought to increase the percentage of reused or recycled household waste. Key waste materials during the construction of new housing should also be reused / recycled. See policy CS4.</i>	- - S, M –LT D/I IR M	In the long term alternative 1 is likely to detract from the SA objective due to more residential dwellings allocated in the NF, more key waste from construction activities and more household waste during operation.
ET4 To reduce the effects of traffic upon the environment	- S, M –LT D R M C	Whilst the focus of the policy is not to tackle traffic issues, the significant amount of new residential units has the potential to result in pressure on key junctions/roads in peak hours depending on the provision of appropriate level of public transport to serve the new neighbourhoods in the NF. Positive effects are likely to occur with the implementation of <i>DM15, DM16, and DM17 of the plan.</i>	- S, M –LT D R M C	Alternative 1 will result in more significant negative effects due to a higher number of housing proposed which will result in more traffic generated during construction and operation.
ET5 To improve access to key services for all sectors of the population	+ M –LT D R M C	The policy will contribute to the achievement of the SA objective through ensuring that any development in the Northern Fringe includes green walking and cycling links to Westerfield station. Significant infrastructure will be put in place to meet the needs of the new neighbourhoods including public transport routes and services. CS10 ensures that the access to services in the Northern Fringe will <i>be improved including new transport routes and services.</i> <i>In addition, some key services will be provided locally to meet the demands of the new residents.</i>	+ M –LT D R M C	The alternative is likely to have similar effects as those identified for the revised policy.
ET6 To limit and adapt to climate change	- S, M – LT D R M C	The policy envisages the use of greenfield land due to limited amount of PDL sites in the Borough. Consequently, there is potential for increased flood risk due to change in land use. Changes in land use may affect the generation of water run-off at local scale. Additionally, new homes will use more energy which will result in increase of greenhouse emissions. <i>Therefore, it will be beneficial to use SuDS to reduce flood risk and manage run-off. See policy DM4.</i> <i>Greenhouse emissions could be reduced through the requirement for new developments to incorporate Code</i>	- - S, M – LT D R M C	In the short term, the effects from the implementation of the policy will be similar to those identified in the revised option with occurrence of the negative effects on climate change at a later stage (after 2021) due to phased land take at the NF. However, in the long term the overall CO2 emissions will increase and more land take will be required due to more housing anticipated to be built. Therefore, it is likely that the alternative will strongly detract from the SA objective.

	CS10: Ipswich Northern Fringe		Alternative 1: Adopted policy 2011	
	<p>The revised policy envisages the development of the whole Northern Fringe (NF) to meet the housing needs assessed in the 2012 SHMA. Originally only 1000 new dwellings were expected to be delivered by 2021; the revised policy is now looking at 3,500 new dwellings for the overall period until 2031.</p>		<p>Land at the Northern Fringe of Ipswich, north of Valley Road / Colchester Road and between Henley Road in the west and Tuddenham Road in the east, will form the main source of supply of housing land in Ipswich after 2021.</p> <p>Due to the limited availability of previously developed land in the rest of the town, the delivery of 1,000 dwellings will be expected to commence prior to 2021 on land to the east of Henley Road and south of the railway line.</p> <p>The indicative capacity at the Northern Fringe identified in the 2010 SHLAA is about 4,500 dwellings.</p>	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
		<p>for Sustainable Homes and BREAAAM standards.</p>		
ET7 To protect and enhance the quality of water features and resources and reduce the risk of flooding	<p>-</p> <p>S,M – LT D R M C</p>	<p>The Northern Fringe site lies partially over a Zone 2 (outer zone) groundwater Source Protection Zone and partially over Secondary A (bedrock and superficial deposits) aquifers.</p> <p>The use of greenfield land for residential use will result in loss of infiltration and increased flood risk in the area. Therefore <i>new developments should be encouraged to use SuDS to manage runoff, reduce further flood risk and protect water quality. See policy DM4.</i></p>	<p>- -</p> <p>S,M – LT D R M C</p>	<p>The provision of more residential dwellings may result in higher environmental risks associated with pollution of water courses in the area of new development.</p> <p>In addition, more land take will be required to meet the housing target which is likely to increase the flood risk in the northern parts of the borough.</p>
ET8 To conserve and enhance biodiversity and geodiversity, including favourable conditions on SSSIs, SPAs and SACs	<p>+/-</p> <p>S,M –LT D R M C</p>	<p>On the whole, the implementation of the policy will result in loss of open countryside and good quality farm land which will have indirect negative impact on biodiversity and potentially affect protected species using the land. Positive effects are likely to occur through green infrastructure and the allocation of land for County Park and retaining existing hedgerows and trees which are the key features of wildlife value.</p> <p>Designated sites are located at a significant distance from the Northern Fringe area and are unlikely to be affected by new development.</p> <p><i>Opportunities should be sought to create/enhance the habitats where new developments will occur.</i></p>	<p>-</p> <p>S,M –LT D R M C</p>	<p>In general terms the effects from the implementation of the policy will be similar to those identified with the preferred option. However, in the long term more land take will be required to allocate 1,000 more new residential dwellings with direct negative effects on biodiversity from noise disturbance, pollution, etc..</p> <p>Not necessarily. It depends on densities used, so the development could occupy the same land area as 3,500 dwellings BUT I would say that the additional residents from a higher number of homes would create greater disturbance to wildlife so that's a negative. Impact would also depend on how well biodiversity features e.g. swift bricks and bat boxes are incorporated into new buildings.</p>
ET9 To conserve and enhance the historic environment, heritage assets and their settings	<p>-</p> <p>S,M –LT D R M C</p>	<p>There are a number of Listed Buildings within the vicinity of the Northern Fringe area: Sparrowe's Nest and Farm (several structures, Grade II) is adjacent to a proposed development block, though protected by screen planting. Other buildings such as Cranfield Court to the southeast (Grade II) are set within existing residential areas.</p> <p>Red House Farm is locally listed and set within the site area. The 19th Century farm and outbuildings as well as the farm garden and woodland to the north of the site will be directly affected by the redevelopment of the area, both through the impact of adjacent development and the potential adaptation of the farm buildings and open land.</p> <p><i>New development should ensure that the heritage assets located within the Northern Fringe area and near its boundary are not adversely affected, through appropriate design, in particular in terms of scale, height, massing, and alignment of new development. In addition, the setting of listed buildings could be conserved through the use of traditional or sympathetic building materials and techniques. Any work to Red House farm should preserve the layout of key structures, including the outbuildings, and the use of historic materials in their construction. Key landscape features nearby, such as the woodland, should be protected from redevelopment. New build within and near to the farm site should sensitively interpret the materials, scale and form of existing buildings.</i></p>	<p>-</p> <p>S,M –LT D R M C</p>	<p>The alternative is likely to have similar effects as those identified for the revised policy.</p>
ET10 To conserve and enhance the quality and local distinctiveness of landscapes and townscapes	<p>-</p> <p>S,M –LT D R M C</p>	<p>It is anticipated that new development will be located on currently undeveloped agricultural fields which will result in significant change of the landscape character of this more rural area of the borough.</p> <p>The policy clearly states that new development will maintain an appropriate physical separation of Westerfield village from Ipswich and include green walking and cycling links to Westerfield station thus reducing the negative effect on landscape.</p>	<p>- -</p> <p>S,M –LT D R M C</p>	<p>The provision of more residential dwellings may result in higher density of housing in the NF with direct negative effects on local character through creating a highly urbanised area, loss of open space and less land allocated for County park and allotments.</p>

	CS10: Ipswich Northern Fringe		Alternative 1: Adopted policy 2011	
	The revised policy envisages the development of the whole Northern Fringe (NF) to meet the housing needs assessed in the 2012 SHMA. Originally only 1000 new dwellings were expected to be delivered by 2021; the revised policy is now looking at 3,500 new dwellings for the overall period until 2031.		Land at the Northern Fringe of Ipswich, north of Valley Road / Colchester Road and between Henley Road in the west and Tuddenham Road in the east, will form the main source of supply of housing land in Ipswich after 2021. Due to the limited availability of previously developed land in the rest of the town, the delivery of 1,000 dwellings will be expected to commence prior to 2021 on land to the east of Henley Road and south of the railway line. The indicative capacity at the Northern Fringe identified in the 2010 SHLAA is about 4,500 dwellings.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
		The local distinctiveness should also be ensured through appropriate design of new development <i>particularly in terms of scale, height, massing, and alignment.</i>		
HW1 To improve the health of those most in need	+/- M -LT D/I R M	Some negative effects are likely to occur due to loss of a large area of open countryside, including some indirect negative effect associated with deterioration of the air quality in the north part of the borough. As identified previously for policy CS7, the provision of decent housing will contribute to the achievement of the SA objective. In addition, policy CS10 ensures healthy lifestyles through the allocation of land for a Country Park, public space, and a new health centre. For these reasons it is considered that the effects will be both positive and negative.	- M -LT D/I R M	In the long term, the provision of more residential dwellings is likely to result in higher density of housing in the NF with direct negative effects associated with loss of open countryside and less land allocated for County park/ allotments, deterioration of air quality due to increase of traffic and dust from construction. Therefore it is considered that the overall effect will be negative.
HW2 To improve the quality of life where people live and encourage community participation	+ M -LT D/I R M	The land to the west of Tuddenham Road north of the railway line is allocated for the replacement playing fields and has the potential to encourage community participation. Additionally, a multi-use community centre will be built as part of the new District Centre thus contributing directly to the achievement of the SA objective.	+ M -LT D/I R M	The alternative is likely to have similar effects as those identified for the preferred option.
ER1 To reduce poverty and social exclusion	+/- M -LT I/D R M	The area of the Northern Fringe is currently ranked as least deprived potentially due to its rural character. New development may result in increase of crime and antisocial activities with some negative effects on deprivation. However, on the whole the provision of new decent homes may reduce deprivation levels at borough level (See CS7).	+/- M -LT I/D R M	The alternative is likely to have similar effects as those identified for the preferred option.
ER2 To offer everybody the opportunity for rewarding and satisfying employment	+ S, M I/D R M	The SA objective will be achieved through the allocation of land for retail uses, and employment opportunities directly related to the construction of new homes and community facilities.	+ S, M I/D R M	Alternative 1 will result in similar effects as the revised policy with slight increase in job opportunities due to higher number of residential dwellings and potentially wider infrastructure network required. However the difference between the options is considered to be insignificant as these are considered to be short term effects.
ER3 To help meet the housing requirements for the whole community	+ + S, M -LT D R M	Policy CS10 will directly contribute to the achievement of the SA objective through the allocation of land for a residential development of approximately 3,500 dwellings. The number of dwellings has been reduced to reflect the capacity of the area. However, it is anticipated that the type of dwellings will address the needs identified in the updated SHMA 2012 with regards to the provision of variety of housing types (two and three bedroom houses).	+ + S, M -LT D R M	The policy envisages the supply of a significant amount housing to meet the needs of the growing population. The provision of more residential dwellings suggests higher proportion of affordable housing which will directly contribute to the achievement of the SA objective.
ER4 To achieve sustainable levels of prosperity and economic growth throughout the plan area	+ M -LT D/I R M	The SA objective will be indirectly achieved through meeting the demand of housing and providing opportunities for the borough to grow and develop. Investment in residential developments will create a number of temporary jobs but also will attract further inward investment by becoming a better place to live.	- M -LT D/I R M	The alternative has the same housing led focus as the revised policy. The allocation of the entire NF area for housing is at a later stage of the plan. The phasing of housing sites is likely to result more difficulties to deliver infrastructure within new development with long periods of construction works which may result in limited opportunities for investment.
ER5 To support vital and viable town, district and local centres	+ S, M -LT D/I R M C	The development of the Northern Fringe is likely to affect the viability of Ipswich town centre by drawing away customers as the policy envisages the creation of new District and Local Centres in the Northern Fringe to meet the local needs. However, as it is also considered that the new development will not simply result in relocation of residents but will also attract new residents, which will have a positive effect on both the town centre and district and local centres. Therefore, it is anticipated that the effects will be both positive and negative.	+ S, M -LT D/I R M C	The alternative is likely to have similar effects as those identified for the preferred option.
ER6 To encourage efficient patterns of	+ S, M -LT	The SA objective will be achieved through the provision of new roads, cycling routes, public transport routes and	+ S, M -LT	The implementation of the alternative is likely to result in similar

	CS10: Ipswich Northern Fringe		Alternative 1: Adopted policy 2011	
	<p>The revised policy envisages the development of the whole Northern Fringe (NF) to meet the housing needs assessed in the 2012 SHMA. Originally only 1000 new dwellings were expected to be delivered by 2021; the revised policy is now looking at 3,500 new dwellings for the overall period until 2031.</p>		<p>Land at the Northern Fringe of Ipswich, north of Valley Road / Colchester Road and between Henley Road in the west and Tuddenham Road in the east, will form the main source of supply of housing land in Ipswich after 2021.</p> <p>Due to the limited availability of previously developed land in the rest of the town, the delivery of 1,000 dwellings will be expected to commence prior to 2021 on land to the east of Henley Road and south of the railway line.</p> <p>The indicative capacity at the Northern Fringe identified in the 2010 SHLAA is about 4,500 dwellings.</p>	
SA Objectives	Impact	Comment <i>Mitigation / Enhancement Measures</i>	Impact	Comment <i>Mitigation / Enhancement Measures</i>
movement in support of economic growth	D/ R M C	services to connect the Northern Fringe development with the town centre and other areas. In addition, efficient patterns of movement will be encouraged through the provision of a range of community facilities within the new neighbourhoods within walking distance of new homes (e.g. park, library, District Centre, etc.).	D/ R M C	effects as those identified for the preferred option.
ER7 To encourage and accommodate both indigenous and inward investment	+ M –LT D/ R M	The SA objective will be indirectly achieved through meeting the demand of housing and providing opportunities for the borough to grow and develop. Investment in residential developments will create a number of temporary jobs but also will attract further inward investment by becoming a better place to live.	- M –LT D/ R M	The alternative has the same housing led focus as the revised policy. The allocation of the entire NF area for housing is at a later stage of the plan. The phasing of housing sites is likely to result more difficulties to deliver infrastructure within new development with long periods of construction works which may result in limited opportunities for investment.
CL1 To maintain and improve access to education and skills for both young people and adults	+ S, M –LT D/ R M C	There is a need to improve educational attainment in the Borough as it is considered that low skill levels and the mismatch between supply and demand of qualified young people is one of the main barriers to economic growth. The revised policy is more specific in the provision of education facilities such as schools, library, etc. The policy envisages the delivery of three primary schools, a secondary school and sixth form to meet the needs of the residents in the new neighbourhoods. Although the provision of these facilities will contribute to the achievement of the SA objective it would be beneficial <i>if opportunities to provide facilities for training and further education for adults are also considered.</i>	? S, M –LT D/ R M C	Whilst alternative 1 states that schools will be provided with new development in the NF it does not include specific details of how the SA objective will be achieved. Therefore, it is considered that alternative 1 is less likely to contribute to the achievement of the SA objective and the overall effect will be negligible.
CD1 To minimise potential opportunities for crime and anti-social activity	- S D R L C	Crime rates are higher than national average with high records of organised crime and hate crime amongst others. The growth in population may result in an increase in thefts in the short term but as this not the only factor that contributes to increase of crime levels, certainty of prediction is rather low. <i>Mitigation measures would include safety by design principles incorporated in new developments.</i>	- S D R L C	More residential dwellings may result in higher crime rates in the short term particularly in the areas already ranked as most deprived in IP-One area. <i>Mitigation measures would include safety by design principles incorporated in new developments.</i>

Table 3 Sustainability appraisal of CS13 and Alternative 1

	CS13: Planning for Jobs Growth		Alternative 1: Adopted policy 2011	
	The policy will encourage the provision in the region of 12,500 jobs between 2011 and 2031. In allocating sites for employment development, the Council will take account of the sectors projected to have the highest jobs growth over the plan period as identified in the Suffolk Growth Strategy. These include: advanced manufacturing and technology; energy; information and communication technology; finance and insurance; food, drink and agriculture; ports and logistics; life sciences, biotechnology and bloodstock; tourism; and creative and cultural industries.		The Council will promote sustainable economic growth in the Ipswich Policy Area. It will encourage the provision of at least 18,000 jobs between 2001 and 2025. In allocating sites for employment development, the Council will take account of the sectors projected to have the highest jobs growth between 2006 and 2026 as identified in the Suffolk Haven Gateway Employment Land Review (2009). These include construction; retail / hotels; distribution; finance and other business services; and public services.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
ET1 To improve air quality	+/- S, M –LT I R L C	Whilst the primary focus of the revised policy is not to tackle air quality issues, it is considered that the appropriate allocation of employment land may result in improvement of air quality if it is easily accessible by sustainable modes of transport. The policy focuses on the provision of jobs within the borough which may reduce longer commuting trips outside the borough. The former Crane's site is a strategic employment site with good public transport accessibility. Therefore it is anticipated that in the long term there will be some indirect positive effects on air quality but the level of certainty of prediction is rather low.	- S, M –LT I R L C	Alternative 1 would potentially result in more land allocated for employment use due to commitment to provide more jobs. Indirect negative effects on air quality are likely to occur due to residents in the neighbouring authorities commuting to the employment hubs in central Ipswich as a result of increased employment opportunities. Therefore it is anticipated that in the long term more indirect negative effects on air quality are likely to occur but the level of certainty of prediction is low.
ET2 To conserve soil resources and quality	+ S, M –LT D R M C	The policy focuses primarily on the allocation of land for employment use; much of it is previously developed land (former Crane's factory). The former Crane's site is an example of a contaminated land which has been redeveloped successfully for its current use and <i>more opportunities should be sought to remediate other potential employment sites.</i>	+ S, M –LT D R M C	The implementation of the alternative is likely to result in similar effects as those identified for the preferred option.
ET3 To reduce waste	- S, M –LT D R M C	The revised policy would potentially result in land allocated for employment use due to commitment to provide jobs. Waste is likely to be generated during operation of employment sites, if appropriate mitigation measures are not in place. <i>Opportunities should be sought to encourage recycling within the new employment hubs.</i>	- S, M –LT D/I R M C	Alternative 1 would potentially result in more land allocated for employment use due to commitment to provide more jobs. More waste is likely to be generated during operation of employment sites, if appropriate mitigation measures are not in place. It also seems odd to have a different score for Alt 1 – I think it should be the same as the revised policy for consistency.
ET4 To reduce the effects of traffic upon the environment	+/- S, M –LT D R M C	The policy will contribute to the achievement of the SA objective through the allocation of land for employment at sites that have good public transport accessibility (e.g. former Crane's factory).	- S, M –LT D R L C	Same as ET1.
ET5 To improve access to key services for all sectors of the population	0 S, M –LT D R M	There is no clear relationship between the policy and / or the achievement of the SA Objective or the relationship is negligible.	0 S, M –LT D R M	There is no clear relationship between the policy and / or the achievement of the SA Objective or the relationship is negligible.
ET6 To limit and adapt to climate change	+/- S, M –LT D R L	Allocating land for employment uses in central urban areas well served by public transport may reduce the need to travel by private car. In addition allocating land for employment use near existing employment hubs (e.g. IP051) may encourage car-share schemes. New employment sites will however use energy and cumulatively will detract from the SA objectives unless mitigation measures are place. For these reasons, it is considered that effects will be both positive and negative. <i>Greenhouse emissions could be reduced through requirement for new business buildings to incorporate BREAAAM standards. See Policy DM1.</i>	+/- S, M –LT D R M C	The implementation of the alternative is likely to result in similar effects as those identified for the preferred option. Again it seems inconsistent to have a different score here from the revised policy.
ET7 To protect and enhance the quality of water features and resources and reduce the risk of flooding	0 S, M –LT D R M	The main areas of employment are not located in or near Flood zone 2 and 3 and the majority of allocations are on brownfield land. In addition, there no strategic site allocations for employment use near the main water features and none of the growth sectors suggest heavy industrial pollution which reduces significantly the risk of water pollution during construction and operation. Therefore it is considered that the overall effect from the implementation of the policy will be neutral.	0 S, M –LT D R M	The implementation of the alternative is likely to result in similar effects as those identified for the preferred option.
ET8 To conserve and enhance biodiversity and geodiversity ,	+ M –LT I	The majority of employment land and strategic employment sites are allocated at a significant distance from designated sites for nature conservation. The sites	+ M –LT I	The majority of employment land and strategic employment sites are allocated at a significant distance from designated sites for nature conservation. The allocated land for

	CS13: Planning for Jobs Growth		Alternative 1: Adopted policy 2011	
	<p>The policy will encourage the provision in the region of 12,500 jobs between 2011 and 2031. In allocating sites for employment development, the Council will take account of the sectors projected to have the highest jobs growth over the plan period as identified in the Suffolk Growth Strategy. These include: advanced manufacturing and technology; energy; information and communication technology; finance and insurance; food, drink and agriculture; ports and logistics; life sciences, biotechnology and bloodstock; tourism; and creative and cultural industries.</p>		<p>The Council will promote sustainable economic growth in the Ipswich Policy Area. It will encourage the provision of at least 18,000 jobs between 2001 and 2025. In allocating sites for employment development, the Council will take account of the sectors projected to have the highest jobs growth between 2006 and 2026 as identified in the Suffolk Haven Gateway Employment Land Review (2009). These include construction; retail / hotels; distribution; finance and other business services; and public services.</p>	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
including favourable conditions on SSSIs, SPAs and SACs	R M C	<p>located near the River Orwell (e.g. IP067) will require <i>further project level assessments to ensure that mitigation measures are applied for potential significant negative effects.</i></p> <p>The land for employment will be allocated through the Site Allocations and Policies DPD and it is anticipated that previously developed land will be used where possible. The policy will contribute to the SA objective if possible contamination is remediated with indirect positive effects on water quality and soil resources. Therefore, the effect is considered to be beneficial in the long term.</p>	R M C	<p>employment use is brownfield. The policy will contribute to the SA objective if possible contamination is remediated with indirect positive effects on water quality and soil resources. Therefore, the effect is considered to be beneficial in the long term.</p>
ET9 To conserve and enhance the historic environment, heritage assets and their settings	- S, M -LT D R M C	<p>The location of strategic employment sites does not suggest any significant negative effects on areas/sites of historical importance. Sites allocated for employment/retail use within the IP-one area (e.g. IP035, IP051, etc.) are likely to affect designated heritage assets as there is a concentration of a great number of listed building in the town centre.</p> <p><i>Where new development is located near listed buildings mitigation measures should be implemented to avoid any significant negative effects through appropriate design techniques.</i></p> <p>Please see CS7 comment on ET9. Surely other CS policies and national policy would prevent any harm. New development could enhance CAs or the setting of listed buildings.</p>	- S, M -LT D R M C	<p>The location of strategic employment sites does not suggest any significant negative effects on areas/sites of historical importance. Sites allocated for employment/retail use in urban town centre are likely to affect designated heritage assets as there is a concentration of great number of listed building in the town centre.</p> <p><i>Where new development is located near listed buildings mitigation measures should be implemented to avoid any significant negative effects through appropriate design techniques.</i></p>
ET10 To conserve and enhance the quality and local distinctiveness of landscapes and townscapes	+ S, M -LT D R M C	<p>The majority of new employment development sites are allocated in urban areas where positive effects on townscape may occur as part of any redevelopment/regeneration schemes.</p>	+ S, M -LT D R M C	<p>The implementation of the alternative is likely to result in similar effects as those identified for the preferred option.</p>
HW1 To improve the health of those most in need	+ M -LT I R M	<p>The policy will indirectly contribute to the achievement of the SA objective through creating more employment opportunities in the borough thus improving the mental health and overall deprivation and reducing poverty.</p>	+ + M -LT I R M	<p>The policy will indirectly contribute to the achievement of the SA objective through creating more employment opportunities in the borough thus improving the mental health and overall deprivation.</p>
HW2 To improve the quality of life where people live and encourage community participation	+ M -LT D/I R M	<p>The policy will contribute to the achievement of the SA objective through supporting the growth of educational facilities and initiatives to improve skills and qualifications levels. The level of educational attainment is low and the local partnerships may have a positive effect on the comprehensive development of the borough and the quality of life.</p>	+ M -LT D/I R M	<p>The implementation of the alternative is likely to result in similar effects as those identified for the preferred option.</p>
ER1 To reduce poverty and social exclusion	+ + M -LT D/I R M	<p>The primary focus of the policy is to promote sustainable economic growth and encourage the provision of a significant number of jobs mainly through the allocation of land for employment and employment generating uses (e.g. education, leisure, etc.). Therefore it is considered that it will contribute to the achievement of the SA objective.</p>	+ + M -LT D/I R M	<p>The primary focus of the policy is to promote sustainable economic growth and encourage the provision of a significant amount of jobs mainly through the allocation of land for employment and employment generating uses (e.g. education, leisure, etc.). Therefore it is considered that it will contribute to the achievement of the SA objective.</p>
ER2 To offer everybody the opportunity for rewarding and satisfying employment	+ + S, M -LT D/I R M C	<p>Although the job figure is lower than that previously identified, it reflects the most recent Forecasting Model in 2012. The revised policy includes a wider range of growth sectors and the SA objective will be achieved through the allocation and protection of employment land and through the joint work with local partners to encourage sustainable growth. As a result, it is anticipated that further employment opportunities will be created.</p>	+ + S, M -LT D/I R M C	<p>The alternative strongly supports the achievement of the SA objective through the provision of employment opportunities that reflect the needs identified at an earlier stage of the plan.</p>
ER3 To help meet the housing requirements for the whole community	0 S, M -LT D I R M	<p>The housing provision is not a primary function of this policy.</p>	0 S, M -LT D I R M	<p>The housing provision is not a primary function of this policy.</p>

	CS13: Planning for Jobs Growth		Alternative 1: Adopted policy 2011	
	The policy will encourage the provision in the region of 12,500 jobs between 2011 and 2031. In allocating sites for employment development, the Council will take account of the sectors projected to have the highest jobs growth over the plan period as identified in the Suffolk Growth Strategy. These include: advanced manufacturing and technology; energy; information and communication technology; finance and insurance; food, drink and agriculture; ports and logistics; life sciences, biotechnology and bloodstock; tourism; and creative and cultural industries.		The Council will promote sustainable economic growth in the Ipswich Policy Area. It will encourage the provision of at least 18,000 jobs between 2001 and 2025. In allocating sites for employment development, the Council will take account of the sectors projected to have the highest jobs growth between 2006 and 2026 as identified in the Suffolk Haven Gateway Employment Land Review (2009). These include construction; retail / hotels; distribution; finance and other business services; and public services.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
ER4 To achieve sustainable levels of prosperity and economic growth throughout the plan area	++ S,M -LT D/I R M	There is a strong commitment in the policy to encourage sustainable levels of prosperity through local partnerships and land supply for employment. In addition, it is considered that the support of higher educational facilities will have a long-term positive effect on economic growth as it may tackle issues with low skills and qualification levels.	++ S,M -LT D/I R M	The implementation of the alternative is likely to result in similar effects as those identified for the preferred option.
ER5 To support vital and viable town, district and local centres	O S, M -LT D R M	Positive effects are likely to occur where employment sites are allocated near Local and District centres (e.g. IP147) and thus contributing to the achievement of the SA objective. However, it is considered that the overall effect will be negligible as the majority of new employment sites are at a distance from Local or District centres.	O S, M -LT D R M	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.
ER6 To encourage efficient patterns of movement in support of economic growth	+ M -LT D/I R M	Efficient patterns of movement will be encouraged through the allocation of land for employment use in areas that are easily accessible by public transport (e.g. former Crane's factory site which is currently served by four buses).	+/- S,M -LT D R L C	Whilst it is recognised that positive effects are likely to occur where employment site allocations are in areas easily accessible by public transport, it is likely that more job opportunities in Ipswich will attract residents from neighbouring authorities and the daily commutes may increase. Therefore it is considered that the effects from the implementation of the policy will be both positive and negative depending on location of main work force groups of the population.
ER7 To encourage and accommodate both indigenous and inward investment	+ M -LT D/I R M	The policy will contribute directly to the achievement of the SA objective through allocation of sufficient land for employment use including leisure, hospitality and retail. In addition, the policy clearly states that employment uses in existing employment areas will be protected which may encourage further investment in the borough.	++ M -LT D/I R M	The policy strongly supports the achievement of the SA objective through allocation of sufficient land for employment use including leisure, hospitality and retail. In addition, the policy clearly states that employment uses in existing employment areas will be protected which may encourage further investment in the borough.
CL1 To maintain and improve access to education and skills for both young people and adults	+ S D/I R M C	Same as HW2 and ER4.	++ S, M -LT D/I R L C	More opportunities for training and education may arise with the provision of additional jobs in the borough. However, the level of certainty is considered to be low as the correlation between job opportunities and education is not direct.
CD1 To minimise potential opportunities for crime and anti-social activity	+ S D/I R M C	Whilst there is no direct relationship between the policy and the achievement of the SA objective, it is considered that employment growth may result in overall reduction of poverty thus decrease in crime levels in the long term.	+ S D/I R M C	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.

Table 4 Sustainability appraisal of CS14 and Alternative 1

	CS14: Retail development		Alternative 1: Adopted Policy 2011	
	Through the Site Allocations and Policies (incorporating IP-One Area Action Plan) DPD, the Council intends to extend the Central Shopping Area to include the Westgate quarter and allocate sites for retail development within it. This will enable the delivery in the region of 15,000 sqm net of additional floorspace to diversify and improve the retail offer. Further allocations will be made through the Site Allocations DPD review following a review of the Retail capacity study to address provision after 2026.		Through the IP-One Area Action Plan, the Council will extend the Central Shopping Area to include the Westgate quarter and the land south of Crown Street and Old Foundry Road and allocate sites for retail development within it. This will enable the delivery of at least 35,000 sqm net of additional floorspace to diversify and improve the retail offer.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
ET1 To improve air quality	- S, M –LT D R M C	The revised policy envisages retail floorspace to be allocated in the Central Shopping Area which is largely pedestrianized and accessible by bicycle. Additionally the town centre is well served by public transport which may reduce the need to travel by private car. However, additional retail floorspace may result in increase of trips to the shopping areas by residents within the borough and from neighbouring areas. As a result, traffic is likely to increase on the main approach roads to and from Ipswich causing deterioration of air quality. <i>Park and ride facilities in the peripheral areas of the borough may encourage people to use sustainable modes of transport to the main shopping area in the town centre.</i>	- S, M –LT D/I R M C	Additional retail floorspace may result in increase of trips to the shopping areas by residents within the borough and from neighbouring areas. As a result, traffic is likely to increase on the main approach roads to and from Ipswich causing deterioration of air quality. <i>Park and ride facilities in the peripheral areas of the borough may encourage people to use sustainable modes of transport to the main shopping area in the town centre.</i>
ET2 To conserve soil resources and quality	+ S, M –LT D R M	The policy focuses primarily on the allocation of land for retail use on previously developed land at Westgate.	+ S, M –LT D R M	The policy focuses primarily on the allocation of land for retail use on previously developed land at Westgate.
ET3 To reduce waste	- S, M –LT D R M	Some positive effects will occur if the vacant premises in the town centre are brought back into active use as stated in the policy. However, more waste is likely to be generated from the delivery of more retail floorspace and the operation activities of the new retail developments. Cumulatively, together with the housing and employment led policies, waste generation may have a significant negative effect on the environmental objectives in the long term if mitigation measures are not in place. <i>Reuse/recycling should be encouraged.</i>	- S, M –LT D/I R M	More waste is likely to be generated from the delivery of more retail floorspace and the operation activities of the new retail developments. Cumulatively, together with the housing and employment led policies, waste generation may have a significant negative effect on the environmental objectives in the long term if mitigation measures are not in place. <i>Reuse/recycling should be encouraged.</i>
ET4 To reduce the effects of traffic upon the environment	+ S, M –LT D R L C	The policy will contribute to the achievement of the SA objective through additional retail site allocations in the Central Shopping Area and key district centres within walking distance from residential areas and well served by public transport.	+ S, M –LT D/I R L C	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.
ET5 To improve access to key services for all sectors of the population	+ M –LT D R M C	The SA objective will be achieved through the enhancement of facilities available in district centres and providing more choice for local residents within walking distance of their homes.	+ M –LT D R M C	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.
ET6 To limit and adapt to climate change	+ LT D R L C	The policy on its own will have negligible effect on climate change, but cumulatively, allocating retail sites in locations with pedestrian access and promoting public transport services may result in less use of private cars as the main transport mode.	+ S, M –LT D R M C	The policy on its own will have negligible effect on climate change, but cumulatively, allocating retail sites in locations with pedestrian access and promoting public transport services may result in less use of private cars as a the main transport mode.
ET7 To protect and enhance the quality of water features and resources and reduce the risk of flooding	0 S, M –LT D R M	The policy promotes extension of the Central Shopping area to include Westgate Quarter which is not located in Flood zone 2 or 3. Therefore it is considered that the effect will be neutral.	0 S, M –LT D R M	The policy promotes extension of the Central Shopping area to include Westgate Quarter and the land south of Crown Street and Old Foundry Road which is not located in Flood zone 2 or 3. Therefore it is considered that the effect will be neutral.
ET8 To conserve and enhance biodiversity and geodiversity , including favourable conditions on SSSIs,	0 M –LT I R M C	The central shopping area will be extended westwards and is unlikely that any designated sites (located in the south part of the borough) will be affected. The land for retail use will be allocated through the Site Allocations and Policies DPD and it is anticipated that previously	0 M –LT I R M C	Alternative 1 envisages extension of the central shopping area both to the west and the east of the existing retail area. It is unlikely that any designated sites (located in the south part of the borough) will be affected from the extension. The alternative will contribute to the SA objective if possible contamination is

	CS14: Retail development		Alternative 1: Adopted Policy 2011	
	Through the Site Allocations and Policies (incorporating IP-One Area Action Plan) DPD, the Council intends to extend the Central Shopping Area to include the Westgate quarter and allocate sites for retail development within it. This will enable the delivery in the region of 15,000 sqm net of additional floorspace to diversify and improve the retail offer. Further allocations will be made through the Site Allocations DPD review following a review of the Retail capacity study to address provision after 2026.		Through the IP-One Area Action Plan, the Council will extend the Central Shopping Area to include the Westgate quarter and the land south of Crown Street and Old Foundry Road and allocate sites for retail development within it. This will enable the delivery of at least 35,000 sqm net of additional floorspace to diversify and improve the retail offer.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
SPAs and SACs		developed land will be used. The policy will contribute to the SA objective if possible contamination is remediated with indirect positive effects on water quality and soil resources. However, on the whole the effect is considered to be negligible in the long term.		remediated with indirect positive effects on water quality and soil resources. However, on the whole the effect is considered to be negligible in the long term. .
ET9 To conserve and enhance the historic environment, heritage assets and their settings	+/- S,M -LT D R M C	The majority of heritage assets (e.g. listed buildings) are located in the town centre of Ipswich and these are likely to be negatively affected by additional retail site allocations. Schemes to make vacant premises look more visually attractive may have both positive and negative effects dependent on the selected design. <i>It would be beneficial to ensure that retail expansion will be encouraged without compromising the settings of any designated heritage assets. Settings of listed buildings could be improved through appropriate design that would complement surrounding retail buildings.</i>	+/- S,M -LT D R M C	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.
ET10 To conserve and enhance the quality and local distinctiveness of landscapes and townscapes	+S,M -LT D R M C	Extension of the Central Shopping Area into the currently part disused Westgate area will have a direct townscape benefit.	+S,M -LT D R M C	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.
HW1 To improve the health of those most in need	O S, M -LT D R M	Whilst improvement of health is important, the focus of the policies relates mainly to promotion of retail developments. As such no significant effects have been identified.	O S, M -LT D R M	Whilst improvement of health is important, the focus of the policies relates mainly to promotion of retail developments. As such no significant effects have been identified.
HW2 To improve the quality of life where people live and encourage community participation	+ M -LT D/I R M	Although the land south of Crown street and Old Foundry Road is excluded from the revised policy, on the whole, the policy will contribute to the achievement of the SA objective through providing more choice for residents to access facilities located within a walking distance from their homes.	+ M -LT D/I R M	The policy will contribute to the achievement of the SA objective through providing more choice for residents to access facilities located within a walking distance from their homes.
ER1 To reduce poverty and social exclusion	+ M -LT D/I R M	Same as above. In addition, creating jobs in retail will help reducing poverty through additional job opportunities.	+ M -LT D/I R M	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.
ER2 To offer everybody the opportunity for rewarding and satisfying employment	++ M -LT D/I R M	Although the figure for additional floorspace has been significantly reduced to 15,000sqm, in the medium and long-term the policy will contribute to the achievement of the SA objective through additional retail site allocations and encouraging further investment and development in Ipswich Central Shopping Area.	++ S, M I/D R M	More employment opportunities are likely to be created with the additional floorspace being allocated for retail uses. Therefore it is considered that the policy will strongly support the SA objective.
ER3 To help meet the housing requirements for the whole community	O S, M -LT D R M	The housing provision is not a primary function of this policy.	O S, M -LT D R M	The housing provision is not a primary function of this policy.
ER4 To achieve sustainable levels of prosperity and economic growth throughout the plan area	+ M -LT D/I R M	The figure for additional net retail floorspace has been significantly reduced to 15,000sqm to reflect the needs and ensure that retail growth is promoted in a sustainable manner. The retail site allocations will contribute to further investment in the town centre and key district centres and contribute to overall economic growth throughout the plan area.	+/- S, M -LT D R M	Although the additional allocation of floorspace suggests economic growth due to more employment opportunities and inward investment, evidence shows that further extension of the retail area to the east may result in oversupply of retail units and therefore not necessarily be sustainable in the long term. Therefore it is considered that the effects from the implementation of the policy are likely to be both positive and negative.
ER5 To support vital and viable town, district and local centres	++ S, M -LT D/I R M C	The policy strongly supports the SA objective and recognises the importance of increasing the vitality of key district centres.	++ S, M -LT D/I R M C	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.
ER6 To encourage efficient patterns of movement in support of	+ M -LT D/I	Efficient patterns of movement will be encouraged through the allocation of retail sites in areas that are easily accessible by foot and public transport (in central	+ M -LT D/I	Efficient patterns of movement will be encouraged through the allocation of retail sites in areas that are easily accessible by foot and public transport (in central Ipswich).

	CS14: Retail development		Alternative 1: Adopted Policy 2011	
	Through the Site Allocations and Policies (incorporating IP-One Area Action Plan) DPD, the Council intends to extend the Central Shopping Area to include the Westgate quarter and allocate sites for retail development within it. This will enable the delivery in the region of 15,000 sqm net of additional floorspace to diversify and improve the retail offer. Further allocations will be made through the Site Allocations DPD review following a review of the Retail capacity study to address provision after 2026.		Through the IP-One Area Action Plan, the Council will extend the Central Shopping Area to include the Westgate quarter and the land south of Crown Street and Old Foundry Road and allocate sites for retail development within it. This will enable the delivery of at least 35,000 sqm net of additional floorspace to diversify and improve the retail offer.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
economic growth	R M	Ipswich).	R M C	
ER7 To encourage and accommodate both indigenous and inward investment	+ M –LT D/I R M	Same as ER4.	+/- S, M –LT D R M	Although the additional allocation of floorspace suggests economic growth due to more employment opportunities and inward investment, evidence shows that further extension of the retail area to the east may result in oversupply of retail units and therefore not necessarily be sustainable in the long term. Therefore it is considered that the effects from the implementation of the policy are likely to be both positive and negative.
CL1 To maintain and improve access to education and skills for both young people and adults	O S, M –LT D R M	There is no clear relationship between the policy and the SA objective.	O S, M –LT D R M	There is no clear relationship between the policy and the SA objective.
CD1 To minimise potential opportunities for crime and anti-social activity	O S, M –LT D R M	There is no clear relationship between the policy and the SA objective.	O S, M –LT D R M	There is no clear relationship between the policy and the SA objective.

Table 5 Sustainability appraisal of CS17 and Alternative 1

	CS17: Delivering Infrastructure		Alternative 1: Adopted Policy 2011	
	The revised policy will allow flexibility on the spending for strategic infrastructure projects throughout the whole borough of Ipswich rather than just within new developments.		The existing system in Ipswich is that of planning obligations, which cover on- and off-site requirements including affordable housing, open space provision, transport measures, and education provision. IBC adopted a standard charge approach to the delivery of infrastructure. Each development will be expected to meet site related infrastructure needs outside the standard charge approach. Affordable housing and on-site open space provision will continue to be dealt with through planning obligations.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
ET1 To improve air quality	+ S, M –LT D R M	Adequate infrastructure within new developments may result in relief of congestion at key routes of the borough. Section 106 agreements and the Community Infrastructure Levy (CIL) will help address road capacity and congestion issues off- site and thus result in improved air quality in the long term. The preferred option performs better against the SA objective because infrastructure improvements will be possible off-site as well as on-site where need is identified. This will provide more flexibility to address congestion issues in areas which already have shown deterioration of air quality. In addition, where appropriate developer contributions may be allocated for the creation of new cycle routes across the borough and not only within new development.	+ S, M –LT D/I R M	In sustainable terms, retaining a S106 Agreement approach will result in similar effects as the revised policy as the necessary infrastructure will be delivered through planning obligations secured through a Section 106 Agreements. However, alternative 1 provides less flexibility to address more strategic infrastructure improvements and to mitigate any negative effects of the development on the existing community and environment.
ET2 To conserve soil resources and quality	0 S, M –LT D R M	There is no clear relationship between the policy and the SA objective.	0 S, M –LT D R M	There is no clear relationship between the policy and the SA objective.
ET3 To reduce waste	0 S, M –LT D R M C	The primary focus of the policy is not to reduce waste. Although the revised policy clearly ensures that waste management infrastructure will be delivered using the pool of developer contributions, no specific measures are foreseen to reduce waste.	0 S, M –LT D R M C	The primary focus of the policy is not to reduce waste. Although the alternative clearly ensures that waste management infrastructure will be delivered no specific measures are foreseen to reduce waste.
ET4 To reduce the effects of traffic upon the environment	+ + S, M –LT D R M C	The policy will contribute to the achievement of the SA objective through the provision of adequate infrastructure within new developments and subsequent relief of congestion at key routes of the borough. In addition, the CIL will help address road capacity and congestion issues off- site. The preferred option allows more flexibility to allocate contributions for strategic infrastructure improvements. Therefore, it is considered to be more beneficial as it will cover the whole borough.	+ S, M –LT D R M C	Alternative 1 will contribute to the achievement of the SA objective through the provision of adequate infrastructure within new developments and subsequent relief of congestion at key routes of the borough.
ET5 To improve access to key services for all sectors of the population	+ S, M –LT D R M C	The policy will contribute to the achievement of the SA objective through Section 106 Agreements and CIL ensuring developers contributions for transport infrastructure at strategic level. The revised policy would allow development and improvements of infrastructure according to the needs identified for all the residents rather than focusing on new development.	+ M –LT D R M C	The implementation of the alternative is likely to result in the same effects as those identified for the preferred option.
ET6 To limit and adapt to climate change	+ S, M –LT D R M C	The preferred option will contribute to the achievement of the SA objective through delivery of Ipswich Flood Defences infrastructure which will alleviate flood risk in the areas adjacent to the river Orwell.	+ S, M –LT D R M C	Alternative 1 would result in the same effects on the SA Objective as the revised policy through delivery of Ipswich Flood Defences infrastructure which will alleviate flood risk in the areas adjacent to the river Orwell.
ET7 To protect and enhance the quality of water features and resources and reduce the risk of flooding	+ S, M –LT D R M C	Same as above.	+ S, M –LT D R M C	Same as above.
ET8 To conserve and enhance biodiversity and geodiversity , including favourable conditions on SSSIs, SPAs and SACs	+ S, M –LT D R M C	Strategic green infrastructure alongside with town centre environmental enhancements will be financed through CIL. Therefore it is considered that the policy will have a positive effect on biodiversity and geodiversity in the borough.	+ S, M –LT D R M C	Strategic green infrastructure alongside with town centre environmental enhancements will be financed through a standard charge. Therefore it is considered that the policy will have similar positive effects on biodiversity and geodiversity as the revised policy.
ET9 To conserve and enhance the historic environment, heritage assets and their	+ S,M –LT D R	The policy may contribute to the achievement of the SA objective through allocation of funds to enhance settings of heritage assets in the borough.	+ S,M –LT D R	The implementation of the alternative is likely to result in the same effects as those identified for the revised policy.

	CS17: Delivering Infrastructure		Alternative 1: Adopted Policy 2011	
	The revised policy will allow flexibility on the spending for strategic infrastructure projects throughout the whole borough of Ipswich rather than just within new developments.		The existing system in Ipswich is that of planning obligations, which cover on- and off-site requirements including affordable housing, open space provision, transport measures, and education provision. IBC adopted a standard charge approach to the delivery of infrastructure. Each development will be expected to meet site related infrastructure needs outside the standard charge approach. Affordable housing and on-site open space provision will continue to be dealt with through planning obligations.	
SA Objectives	Impact	Comment Mitigation / Enhancement Measures	Impact	Comment Mitigation / Enhancement Measures
settings	M C		M C	
ET10 To conserve and enhance the quality and local distinctiveness of landscapes and townscapes	+ LT D/I R M C	The policy is likely to contribute to the achievement of the SA objective through allocation of funds to invest into public realm enhancement measures .	+ LT D/I R M C	The implementation of the alternative is likely to result in the same effects as those identified for the revised policy.
HW1 To improve the health of those most in need	+ S, M –LT D R M C	Sport and leisure facilities will be delivered through the implementation of this policy. In addition, developers' contributions will be used for the new country park and community facilities including GP surgeries and health centres. It is therefore considered that health issues will be addressed with the implementation of this policy.	+ LT D/I R M C	The implementation of the alternative is likely to result in the same effects as those identified for the revised policy.
HW2 To improve the quality of life where people live and encourage community participation	+ S, M –LT D R M C	On the whole the quality of life will be improved though the provision of key infrastructure facilities e.g. schools, flood defences, etc. Community participation will be encouraged with the creation of a country park and sport and leisure facilities serving the whole borough.	+ LT D/I R M C	The implementation of the alternative is likely to result in the same effects as those identified for the revised policy.
ER1 To reduce poverty and social exclusion	+ S, M –LT I R M C	Improved infrastructure will improve the overall quality of life in the borough and attract inward investment. For these reasons it is considered that the policy will have a positive effect on the standard of life and will contribute indirectly to the achievement of the SA objective.	+ S, M –LT I R M C	The implementation of the alternative is likely to result in the same effects as those identified for the revised policy.
ER2 To offer everybody the opportunity for rewarding and satisfying employment	0 S, M –LT D R M	The primary focus of the policy is not to address employment issues. Although some job opportunities will be created through local infrastructure projects, it is anticipated that overall effect on employment figures will be negligible.	0 S, M –LT D R M	The implementation of the alternative is likely to result in the same effects as those identified for the revised policy.
ER3 To help meet the housing requirements for the whole community	0 S, M –LT D R M	The housing provision is not a primary function of this policy.	0 S, M –LT D R M	The housing provision is not a primary function of this policy.
ER4 To achieve sustainable levels of prosperity and economic growth throughout the plan area	+ M –LT D/I R M	See the notes for HW2 and ER1.	+ M –LT D/I R M	See the notes for HW2 and ER1.
ER5 To support vital and viable town, district and local centres	+ S, M –LT D/I R M C	Positive effects are likely to occur through the provision of public transport facilities, the provision of community facilities in centres and community safety initiatives in the Town centre funded through CIL.	+ S, M –LT D/I R M C	The implementation of the alternative is likely to result in the same effects as those identified for the revised policy.
ER6 To encourage efficient patterns of movement in support of economic growth	+ S, M –LT D/I R M C	The SA objective will be achieved through the Ipswich Major Scheme 'Travel Ipswich' and accessibility improvements between the Central Shopping Area, Waterfront, and railway station.	+ S, M –LT D/I R M C	The policy will contribute to the achievement of the SA objective through sustainable transport measures e.g. additional park and ride, the Ipswich Major Scheme and accessibility improvements between the Central Shopping Area, Waterfront and railway station as well as measures to increase east-west capacity in the transport system to ease congestion.
ER7 To encourage and accommodate both indigenous and inward investment	+ S, M –LT I R M C	Improved infrastructure will improve the overall quality of life in the borough and attract inward investment. For these reasons it is considered that the policy will have a positive effect on the standard of life and will contribute indirectly to the achievement of the SA objective.	+ S, M –LT I R M C	The implementation of the alternative is likely to result in the same effects as those identified for the revised policy.
CL1 To maintain and improve access to education and skills for both young people and adults	? S D/I R L C	Although the implementation of the policy has the potential to improve educational attainment through the strategic provision of new schools, it is uncertain whether the overall educational attainment will be improved significantly as other factors also influence the level of skills and qualifications.	? S D/I R L C	Although the implementation of the policy has the potential to improve educational attainment through the provision of new schools, it is uncertain whether the overall educational attainment will be improved significantly as other factors also influence the level of skills and qualifications.
CD1 To minimise potential opportunities for crime and anti-social	0 S, M –LT D	There is no clear relationship between the policy and the SA objective.	0 S, M –LT D	There is no clear relationship between the policy and the SA objective.

	CS17: Delivering Infrastructure		Alternative 1: Adopted Policy 2011	
	The revised policy will allow flexibility on the spending for strategic infrastructure projects throughout the whole borough of Ipswich rather than just within new developments.		The existing system in Ipswich is that of planning obligations, which cover on- and off-site requirements including affordable housing, open space provision, transport measures, and education provision. IBC adopted a standard charge approach to the delivery of infrastructure. Each development will be expected to meet site related infrastructure needs outside the standard charge approach. Affordable housing and on-site open space provision will continue to be dealt with through planning obligations.	
SA Objectives	Impact	Comment <i>Mitigation / Enhancement Measures</i>	Impact	Comment <i>Mitigation / Enhancement Measures</i>
activity	R M	It could help to fund police facilities or community safety measures.	R M	