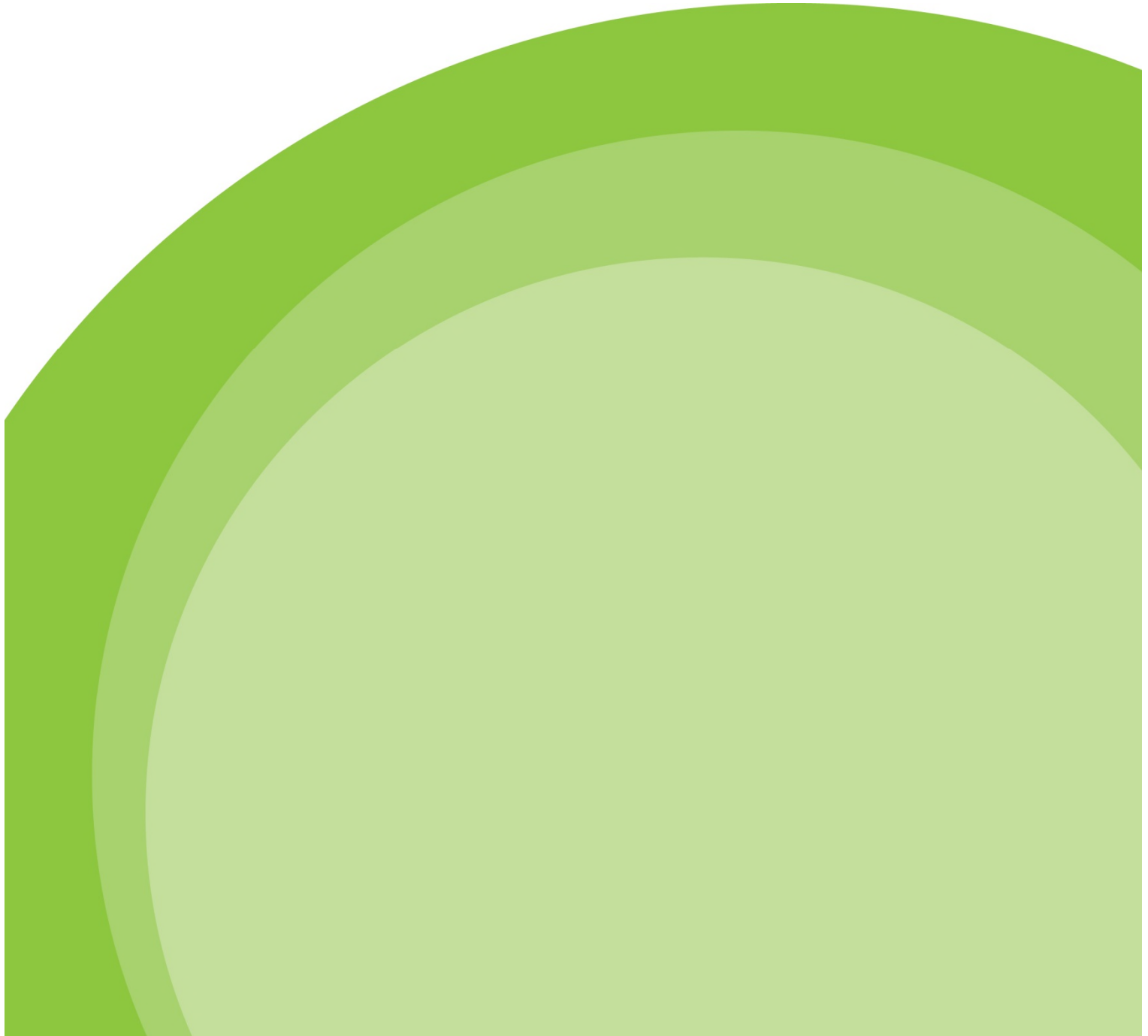


Sustainability Appraisal Appendices

July 2017



Appendix I: Statement on Compliance with SEA Directive & Regulations

The EU SEA Directive¹ (Annex 1) requires certain information to be provided in the Environmental Report. This requirement is implemented into UK legislation through the SEA Regulations (2004)². This is Appendix 1 of the Sustainability (Integrated) Report that constitutes the Environmental Report as required by the SEA Directive and the UK SEA Regulations.

This Appendix 1 sets out how the requirements for SEA have been met and signposts where this information is found in the Sustainability Appraisal Report (August 2016) –and in accordance with paragraph 165 of the National Planning Policy Framework (2012)³.

SEA Directive & Regulation Requirements	SA Report Section	Summary of Contents
<i>An outline of the contents, main objectives of the plan and relationship with other relevant plans</i>	Section 1: Introduction & 7 SA of Reg 18 Draft LP Appendix III	Sets out the vision and main objectives of the Draft Central Bedfordshire Local Plan (CBLP); compatibility of Plan Strategic Objectives with SA Objectives detailed in appendix and findings summarised in Section 7 of main report.
	Section 3: Context & Baseline Appendix II	Summarises the relationship with other relevant plans and the implications for the Draft CBLP; details provided in SA Scoping Report and as Appendix II (available separately on Council's website) to this Initial SA Report
<i>The relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the plan</i>	Section 3: Context & Baseline Appendix II	Summarises the relevant baseline conditions for sustainability (including the state of relevant environmental aspects) in the CBLP area, and likely evolution without the Plan.

¹ <http://ec.europa.eu/environment/eia/sea-legalcontext.htm>

² <http://www.parliament.uk/documents/post/postpn223.pdf>

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

SEA Directive & Regulation Requirements	SA Report Section	Summary of Contents
<i>The environmental characteristics of the area likely to be affected</i>	Section 3: Context & Baseline	Summarised in Section 3 of Main Initial SA Report; details provided in SA Scoping Report and as Appendix II (available separately on Council's website) to this Initial SA Report
<i>Any existing environmental problems which are relevant to the plan including, in particular, those in relation to any areas of a particular environmental importance</i>	Section 3: Context & Baseline	Summarises existing sustainability (including environmental problems) for the CBLP area.
<i>The environmental protection objectives relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation</i>	Section 2: SA Methods Section 3: Context & Baseline Appendix II	Provides the summary of objectives for sustainability in the CBLP area (including environmental objectives) and the implications of these objectives for the Draft CBLP. Detailed SA Framework guiding assessment of effects against the Objectives.
<i>The likely significant effects on the environment including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects</i>	Section 2: Sustainability Appraisal Methods Table 2.2 Appendix II	Presents the SA Framework of objectives that shows which of the issues listed by the SEA Regulations are progressed by which SA objectives. This ensures that all the issues are considered during the assessment of each element of the Draft CBLP. All options, policies and site allocations are assessed against SA objectives.
	Section 5: SA of the Strategic Options Section 6: SA of DM Policies Section 7: SA of Reg 18 draft Plan Appendices IV to VI	Summarises the likely significant effects of implementing the Draft CBLP (including environmental effects) with details provided in the appendices. Where possible, an indication is given of whether the effect is likely to be cumulative, short, medium and long term.
<i>The measures envisaged to prevent, reduce and as fully as possible offset any</i>	Section 5: SA of the Strategic	Where potential significant negative effects are predicted, the SA has sought to provide suggestions for mitigation possibilities.

SEA Directive & Regulation Requirements	SA Report Section	Summary of Contents
<i>significant adverse effects on the environment of implementing the plan</i>	Options Section 6: SA of DM Policies Section 7: SA of Reg 18 Draft Plan Appendices IV to VI	These are provided in Sections 5-7 of the SA Report and in the appraisal matrices (Appendices IV-VI).
<i>An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information</i>	Section 4: Options & Alternatives Section 5: Strategic Options	Section 4 explains how the assessment was undertaken. The potential strategic options were appraised through SA and the details are provided in appendices IV & V. The reasons for progressing options & not taking others forward is outlined in Section 5, including table 5.12 Strategic Options and 5.7 for the Growth Locations.
	Sections 2 & 3 Methods & Context, Baseline	Outlines how the assessment was undertaken – the appraisal methodology and difficulties encountered in compiling information are noted.
<i>A description of the measures envisaged concerning monitoring</i>	Section 9: Proposed Monitoring	Provides measures proposed for monitoring the sustainability (and environmental) effects of the implementation of the Draft CBLP.
<i>A non-technical summary of the information provided under the above headings</i>	Report preface (available separately)	Provides a non-technical summary.

Appendix III: Central Bedfordshire Local Plan Strategic Objectives and SA Objectives Compatibility Analysis

Key:

Neutral	○
Compatible	+
Uncertain	?
Incompatible	-

Plan Strategic Objectives													
SA Objective	1) Ensure sustainable growth; promote community hubs	2) Meet housing and job targets; good urban design	3) Conserve and enhance heritage assets and settings	4) High quality and sustainable design of neighbourhoods	5) Meet employment targets	6) Employment land for different Sectors & manage surplus land	7) Link deprived areas with employment benefits	8) Meet housing needs in Central Bedfordshire	9) Promote sustainable transport and reduce car use	10) Improved access to services and facilities & bus/rail links	11) Promote healthier & more active Lifestyles	12) Protect and enhance biodiversity	13) Support adaptation to Climate Change; reduce pollution
1.Housing	0	+	0	0	0	0	0	+	0	0	0	0	0
2.Communities	+	+	+	+	0	0	0	?	0	0	0	0	0
3.Accessibility to Services & Facilities	+	+	0	+	0	0	0	?	+	+	0	0	0
4. Economy & Employment	0	+	0	+	+	+	+	0	+	0	0	0	0
5.Health & Equality	+	+	0	+	+	+	+	+	+	+	+	+	+
6.Highways AQ	+	+	0	+	?	?	?	?	+	+	+	0	+
7.Sustainable Transport	+	+	0	+	?	?	?	?	+	+	+	0	+
8.Energy & Climate change	0	+	0	+	?	?	?	?	+	+	+	+	+
9.Water Resources & Quality	0	-	0	+	-	-	-	-	0	0	+	+	+
10.Reduce Flood Risk	0	+	0	+	?	?	?	?	0	0	0	0	+

11. Soils	0	-	0	0	-	-	-	-	0	0	0	+	+
12.Biodiversity & Geodiversity	0	+	0	+	?	?	?	?	0	0	+	+	+
13.Landscape & Townscape	0	+	+	+	?	?	?	?	0	0	+	+	+
14.Historic Environment	0	+	+	+	?	?	?	?	0	0	0	0	0

Summary Findings:

All the strategic objectives are compatible with and support the progression of at least one of the sustainability objectives. As would be expected there is incompatibility in the strategic objectives to deliver new housing and employment growth with the sustainability objectives to conserve water resources and protect soil quality. Increased water supply and loss of greenfield land are inevitable consequences of growth in the Plan area that cannot be avoided. Other strategic objectives however do seek to minimise the effects and protect these resources in so far as possible. Without precise locational and lower level details, the compatibility of strategic objectives for growth with sustainability objectives for environmental protection are also largely uncertain.

Recommendations:

- The opportunities for positive effects on equalities could be enhanced by expanding Strategic Objective 9 to link deprived areas with both employment and housing major development site benefits
- Settlement identities could be further protected by a Strategic Objective relating to the protection of essential areas of Green Belt land
- Environmental protection could be enhanced by the inclusion of soil quality in Strategic Objective 13, this would provide enhanced protection for best and most versatile agricultural land
- Environmental protection could be enhanced by the inclusion of a strategic water efficiency objective for new development in a water stressed plan area, this would support the objectives of Water Resource Management Plans in the area.

Appendix IV: SA of Strategic Options

Strategic SA of Areas A-D for Approaches to Development Growth

Key:

Categories of Significance		
Symbol	Meaning	Sustainability Effect
++	Major Positive	Proposed development encouraged as would resolve existing sustainability problem
+	Minor Positive	No sustainability constraints and proposed development acceptable
0	Neutral	Neutral effect
?	Uncertain	Uncertain or Unknown Effects
-	Minor Negative	Potential sustainability issues: mitigation and/or negotiation possible
--	Major Negative	Problematical and improbable because of known sustainability issues; mitigation likely to be difficult and/or expensive
-	+	SA Objectives 2, 4, 5, 9 & 11 consider more than one sub-topic such that more than one significant effect may be predicted with two symbols.
		No 2 Communities – first symbol refers to in/out of Green Belt; second symbol refers to community & settlement identities No 4 Employment – first symbol refers to employment support; second symbol refers to vitality/viability of town centres No 5 Health & Equality – first symbol refers to regeneration/deprivation & equality; second symbol refers to Green Infrastructure for health & well-being No 9 Water – first symbol refers to water resources; second symbol relates to water quality No 11 Soil & Land – first symbol refers to greenfield & agricultural land qualities; second symbol relates previously developed land

Potential Areas A-D for Approaches to Development Growth (http://www.centralbedfordshire.gov.uk/planning/policy/local-plan/shaping-central-beds-consultation.aspx)	
A	South & West/M1 Corridor
B	East/A1 Corridor
C	East/West Corridor
D	Central Section

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Options for Approaches to Growth			
		A South & West/M1	B East/A1	C East/West Corridor	D Central Section
1. Housing To ensure that the housing needs of all residents and communities are met	All the options have the potential for positive effects but there is some uncertainty about whether each option could provide sufficient housing to meet identified needs within the Plan area and/or housing needs outside the Plan area. All the options could provide an appropriate mix of types of housing but this is more likely to be deliverable with more certain major positive effects for the medium to larger scale growth that could be potentially possible in Areas A, B & C. There is some potential for medium scale growth along the major transport corridor following the M1, A5 and the railway (Midland Main Line) with positive effects for meeting housing needs of communities in Area A, particularly Dunstable. There is potential for some large-scale growth immediately adjacent to Luton that could be linked to the Luton-Dunstable Busway with positive effects for helping to meet the needs arising from the Luton Council area. Area B has the potential for major growth with positive effects for	++?	++?	++?	++?

	meeting the needs of communities within this area of the Plan; some uncertainty as there would need to be associated provision of employment to minimise out-commuting and care with regard to avoiding any negative effects for the existing communities. Area C is an important economic area with close links to Milton Keynes and well-connected with the improved A421, M1 and the planned upgrading for the East West Rail between Oxford and Cambridge. There is the potential for major positive effects in the long-term but uncertainty at this stage of plan-making. Area D is characterised by market towns and villages linked by rural roads; any growth potential is likely to be small-medium and focused around settlements with good services; unlikely to meet the needs of the Plan area and would not contribute to housing needs outside the Plan area. Minor positive effects and some uncertainty as depends on availability of suitable sites.								
2. Communities To maintain and enhance community and settlement identities	Major development in Area A will result in loss of the Green Belt (GB) with potential major cumulative negative effects for coalescence of existing settlements without significant landscape buffering. However, these constraints are recognised such that Area A suggests some growth potential for around Luton and only limited growth for settlements along major transport routes. Depends upon justification for release of Green Belt land. The recent Green Belt Study ¹ has identified those areas that only weakly contribute to GB aims, including areas adjacent to the Luton Council area – therefore, although there is potential for major negative effects, this is uncertain as it would depend upon the precise location of development sites. Mitigation measures may be possible through reducing the amount of development to non-strategic levels of new homes (<500) to better integrate development within existing settlements and locating sites on those areas that only weakly contribute to GB aims.	--?	?	+	?	+	?	+	?

¹ LUC for Central Bedfordshire Council (September 2016) Green Belt Study

	Growth in Areas B, C & D will avoid the Green Belt with minor positive effects. All the options have the potential for negative or positive effects with regard to integration and the identity of a settlement or community – uncertainty at this stage as this depends upon the sensitivity of the settlement/community and the scale/design of the development proposal. Whilst smaller developments might seem to be more readily integrated, larger developments can be more creative in scope and design offering enhancements to existing communities. This is acknowledged by Government, for example, with regard to the recent call for interest in locally-led garden villages².				
3. Services & Facilities To improve accessibility to services and facilities³	All new development can ensure that there are no negative effects on existing facilities & services and all could have the potential to improve accessibility. Generally, although the major development sites (including new villages or extensions to settlements) have the potential to have major negative effects on services, they also have the greater potential for positive effects through early, creative masterplanning with the scale/scope to provide sustainable community infrastructure. A Development Management Policy: Provision for Social & Community Infrastructure is being drafted for the Local Plan – developers will be required to deliver new facilities & services taking an integrated approach, ensuring timely delivery, and applying the principles of multi-functional space. This will provide mitigation measures but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location. Strategic areas for development and then potential allocation sites will be investigated, including testing through SA; further mitigation measures will be developed for any negative effects identified – through Policy and site specific requirements.	+	+	+	+

² <https://www.gov.uk/government/publications/locally-led-garden-villages-towns-and-cities>

³ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

4. Employment		+++?	+++?	+++?	++?
To support the economy and ensure that there are suitable opportunities for employment	There is some potential for medium scale growth along the major transport corridor following the M1, A5 and the railway with positive effects for meeting employment needs of communities in Area A. Potential for major positive effects but uncertainty at this stage. This option offers strong opportunities to support and enhance the vitality and viability of town centres – Dunstable and Luton. Area B, along the A1 corridor and the potential for EWR to the north of Sandy, has the potential for major employment growth associated with positive effects for meeting the needs of communities within this area of the Plan; uncertainty at this stage and care will be needed with regard to avoiding any negative effects for the existing communities. Growth in this area will be expected to generate investment to benefit town centres and improve local services. Area C is an important economic area with close links to Milton Keynes and well-connected with the improved A421, M1 and the planned upgrading for the East West Rail between Oxford and Cambridge. There is the potential for major positive effects on the economy & employment in the long-term but uncertainty at this stage of plan-making. Area D is characterised by market towns and villages linked by rural roads; any growth potential is likely to be small-medium and focused around settlements with good services. Minor positive effects and uncertainty as local need not known and depends on availability of suitable sites. There are no known requirements for employment land to help meet needs arising from outside the Plan area, and especially for Luton Borough adjacent to Area A. All the options could provide opportunities to support and enhance the vitality and viability of town centres with positive effects – uncertainty at this stage of assessment.				

	Development Management Policies on Employment Sites & Uses are being drafted for the Local Plan, including proposed strategic site allocations and guidance on use. These will provide mitigation measures but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location. Strategic areas for development and then potential allocation sites will be investigated, including testing through SA; further mitigation measures will be developed for any negative effects identified – through Policy and site specific requirements.				
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	Area A includes areas of high deprivation⁴, particularly around Houghton Regis. Therefore, potential for major positive effects but uncertainty as depends on size and location of development. Also, potential for positive effects for deprived communities in Luton (59 most deprived out of 326 authorities in England) – with identified needs outside the Plan area; care would be needed to ensure that health facilities & green infrastructure (GI) have the capacity to accommodate increased numbers of people. Area A has opportunities for enhancing GI⁵ around Leighton Buzzard/Linslade and around Luton/Dunstable in the south; also, the proposed Greensand Ridge Cycle Route. Areas B & C have the potential for major growth – and the scale/scope of such development offers possibilities for provision of health facilities & GI enhancement. There is some deprivation around Sandy in the north of Area B and trends indicate that deprivation is increasing here, although this does remain outside the most 30% deprived areas in England – so potential for further positive effects in the north of the Plan area. Area B has possibilities for GI enhancement around the river corridor throughout the area. Area C has a band of GI in the north-east with	++?	++?	++?	0?

⁴ <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

⁵ http://www.centralbedfordshire.gov.uk/Images/environmental-framework-v4_tcm3-14493.pdf

	opportunities for enhancement at the Forest of Marston Vale and an identified accessible greenspace deficit near St Neots. The planned Bedford & Milton Keynes Waterway⁶ will link Milton Keynes, Bedford & the Grand Union Canal with Eastern waterways via a series of waterway parks – creating a permanent green/blue corridor through the heart of the growth area with major positive long term effects that would be cumulative & synergistic. Uncertainty at this stage of assessment for details and timing of implementation. Area D is characterised by market towns and villages linked by rural roads; any growth potential is likely to be small-medium and focused around settlements with good services. Neutral effects and uncertainty as depends on availability of suitable sites and capacity of existing services and GI. Possibilities for GI enhancement through GI corridor Number 4 and the proposals for the Greensand Ridge Cycle Route and new accessible greenspace to serve Potton and Sandy. The scale and scope of major developments, including new villages, can offer thresholds for sustainable development through creative masterplanning with major improvements/provision of health services and Green Infrastructure. The positive effects of green infrastructure on health is well evidenced⁷. This is acknowledged by Government, for example, with regard to the ongoing trials for healthy new towns⁸ that are seeking to rethink how health and care services can be delivered. There are 2 demonstrator sites at Bicester, Oxon and Northstowe, Cambs and these may provide lessons learnt that could be applied to Central Bedfordshire. A Development Management Policy: Provision for Social & Community Infrastructure is being drafted for the Local Plan – developers will be required to deliver new facilities & services & Green Infrastructure. This will provide mitigation measures but still uncertainty for the SA at this				
--	--	--	--	--	--

⁶ <http://www.b-mkwaterway.org.uk/the-waterway/route/>

⁷ <http://planningguidance.communities.gov.uk/blog/guidance/natural-environment/green-infrastructure/>; Also, guidance from Natural England, Landscape Institute, RTPI, TCPA and <http://www.centralbedfordshire.gov.uk/planning/green/plans.aspx>

⁸ <https://www.england.nhs.uk/ourwork/innovation/healthy-new-towns/>

	stage as effects will depend upon the scale/scope of development and the precise location.				
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Strategic road & rail links north-south are good but there are gaps for strategic movement east-west that will be improved with the A5-M1 link road⁹. Long journey times exacerbated by high out-commuting are established characteristics for the Plan area. There is some potential for medium scale growth along the major transport corridor following the M1, A5 and the railway with the potential for negative effects in Area A; uncertainty as this depends on the location and scale of development and further transport capacity studies. Mitigation measures are available by ensuring that new development is located where there is existing capacity with potential neutral effects. The A1 corridor running through the Plan Area B is a strategic location for the warehousing industry with good, fast access to the national/international road network and important to maintain; also, the East Coast Railway. Major growth in this area has potential but it would need to be associated with jobs to minimise increased out-commuting and the capacity of the rail and road networks will need to be investigated; likely cumulative negative effects but uncertainty until further studies are completed. Larger developments are more likely to be able to support funding for upgrading the strategic road network. Area C is well-connected with the improved A421, the M1 and the planned section upgrade for East West Rail¹⁰ between Oxford and Cambridge. There is the potential for major development, including new settlements, to contribute to further improvements and ensure the continuing capacity of the strategic road and rail networks;	0?	-?	-?	-?

⁹ Central Bedfordshire Local Transport Plan 3 2011-2026

¹⁰ <http://www.eastwestrail.org.uk/>

	uncertainty until further transport and capacity studies completed. Larger developments are more likely to be able to support funding for upgrading the strategic road network. Area D is characterised by market towns and villages linked by rural roads; the potential to upgrade roads is unlikely such that negative effects are likely from increased development. Mitigation measures are possible by limiting new development to a size and location that can be accommodated within the capacity of the local road network – uncertainty remains until further studies. Effects on traffic and the highway network will have concomitant effects on air quality and greenhouse gas emissions. Significant negative effects are more likely to occur in the short-term as it is assumed that long-term air quality is likely to improve as a result of stringent emissions controls on new vehicles via European standards¹¹. In 15 to 20 years' time low emission vehicles will make up the majority of cars on the roads in the UK. It is also likely that there will be reductions in various contributing sectors that will also result in reductions in background concentrations of atmospheric pollutants. However, this is uncertain at this stage. This along with the potential improvements to strategic road infrastructure and public transport could help to improve air quality. Particular consideration will be needed for Sandy, Ampthill and Dunstable that have Air Quality Management Areas designated primarily due to traffic.				
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	Development within walking/cycling distance of mainline railway stations and services/jobs to discourage out-commuting will provide mitigation measures to reduce the potential negative effects. Potential for a neutral effect. Careful and early masterplanning will help to ensure that opportunities for a modal shift are progressed but uncertainty at this stage of assessment until further studies are completed.	+	++	++	0

¹¹ <http://ec.europa.eu/environment/air/transport/road.htm>

	Area A is well connected to the Midland Main railway line and smaller-medium sized developments for towns/villages such as, Flitwick, Westoning & Harlington, along well-connected public transport routes could encourage a modal shift with positive effects. Larger scale developments with major opportunities to promote sustainable transport are only likely to be possible adjacent to Luton and to help meet the needs outside the Plan area. Uncertain at this stage as depends upon precise locations and housing numbers. Area C with possibilities for major development, including new settlements/villages, has the potential to support the delivery of the proposed East West Rail Link with major positive effects but uncertainty at this scale of assessment. Larger scale developments also have the scope for effective design and implementation of sustainable transport modes – cycling and walking – with the potential for major positive effects, especially if this can be linked into the limited networks available in the Plan area. Similarly, Area B with the potential for upgrading the A1 and the East Coast Railway; it also includes the long distance Great North Cycleway with potential for links and positive effects beyond the Plan area. Area D is characterised by market towns and villages linked by rural roads and limited sustainable transport modes; there is also an issue for the long distances needed to access services and facilities in the rural area, encouraging car use. Mitigation measures are possible by limiting new development to a size and location focused around settlements with existing services and suitable sites. Potential for neutral effects but uncertainty remains until further studies.				
8. Energy & Climate Change To maximise the	All development has the potential for high energy efficiency and carbon neutrality but generally, the scale and scope of the larger developments, especially new villages, offers potential possibilities for exemplar design and construction including local renewable energy	0?	0?	0?	0?

potential for energy efficiency, reduce greenhouse gas emission and withstand the effects of climate change ¹²	schemes where appropriate, with potential positive effects. Potential for minor negative effects during the construction phases with potential for neutral effects in the longer term but uncertainty at this stage of assessment for all 4 Areas. This is supported by strong policy mitigation provided through Local Plan policies (Successful and Sustainable Places, Modern Methods of Construction, Climate Change and Sustainability and Renewable Energy Development) which seek to deliver high levels of efficiency as well as maximise opportunities for climate change mitigation and adaptation.				
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	All development has the potential for high water efficiency and water neutrality but generally, the scale and scope of the larger developments, especially new villages, offers potential possibilities for exemplar design and construction including local water reuse/recycling schemes where appropriate. This is particularly relevant in the Anglian Water region with issues for water resources – high population and relatively low rainfall. Therefore, potential for neutral effects but uncertain until further studies including the Water Cycle Study are completed. Development Management Policies to protect environmental resources, including water quality, are being drafted for the Local Plan. These will provide mitigation measures with resultant neutral effects but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location.	0?	0?	0?	0?
9. Flood Risk To reduce the risk of flooding from all sources	A Development Management Policy on Flood Risk is being drafted for the Local Plan in line with Government guidance. This will provide mitigation measures with resultant neutral effects but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of	0	0	0	0

¹² Please note that Flood Risk is considered by the SA within objective number 10

	development and the precise location. The larger developments, including new villages and settlements, have the scale and scope to provide creative design and potentially contribute to resolving existing flood risk issues – however, uncertain until further studies and depends upon location.				
10. Soil To protect and conserve soil	The Plan area is predominantly rural and Defra identifies small pockets of best and most versatile agricultural land situated largely around the borders of the Plan area, particularly surrounding Bedford and Milton Keynes, and an area surrounding Biggleswade¹³. However, most rural land is greenfield and less important agricultural land Grade 3b-5. All development will take land and the soil resource will be lost with permanent negative effects. However, mitigation is available to avoid the best and most versatile agricultural land resulting in minor effects. The scale and scope of larger developments tend to offer possibilities for higher densities of housing and the potential for soil/greenfield enhancement through Green Infrastructure and possibilities for allotments and community gardens.	-	-	-	-
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	There are no European designated sites within the Plan area although there are several outside the area but within the Plan's influence. There are nationally and locally important sites for biodiversity and geodiversity. Development Management Policies on Green Infrastructure, Enhancing Ecological Networks and Nature Conservation are being drafted for the Local Plan and these will avoid important assets to avoid negative effects. These will provide mitigation measures with resultant potential neutral effects but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location.	0?	0?	0?	0?

¹³ Defra Magic Map Application

	The larger developments, including new villages or a new settlement, will have the scale and scope to provide creative design and contribute to enhancement of green infrastructure and ecological networks – however, this is uncertain until further studies and will depend upon the location.				
13. Landscape Protect and enhance the landscape and townscape	All development has the potential for negative effects on landscape and townscape – and this may be particularly significant for the Plan area with its' predominantly rural character with larger areas of flat land and high levels of tranquillity. Vulnerability and sensitivity to change have been identified ¹⁴ for a number of settlements – this will be taken into account in further studies such that potential major negative effects may be reduced. Development Management Policies on Landscape Character & Value are being drafted for the Local Plan and these will avoid important assets and settings to avoid negative effects. These will provide mitigation measures with resultant potential cumulative negative effects but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location.	-	-	-	-
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	The Plan area has a rich historical heritage with nationally and locally important assets. Development Management Policies on the Historic Environment are being drafted for the Local Plan and these will avoid important assets and settings to avoid any major negative effects. These will provide mitigation measures with resultant potential cumulative neutral effects but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location.	0	0	0	0

¹⁴ CBC Landscape Character Assessment (2016)

Appendix IV: Strategic SA of Approaches to Distribution of Development Growth

Key:

Categories of Significance		
Symbol	Meaning	Sustainability Effect
++	Major Positive	Proposed development encouraged as would resolve existing sustainability problem
+	Minor Positive	No sustainability constraints and proposed development acceptable
0	Neutral	Neutral effect
?	Uncertain	Uncertain or Unknown Effects
-	Minor Negative	Potential sustainability issues: mitigation and/or negotiation possible
--	Major Negative	Problematical and improbable because of known sustainability issues; mitigation likely to be difficult and/or expensive
-	+	SA Objectives 2, 4, 5, 9 & 11 consider more than one sub-topic such that more than one significant effect may be predicted with two symbols. No 2 Communities – first symbol refers to in/out of Green Belt; second symbol refers to community & settlement identities. No 4 Employment – first symbol refers to employment support; second symbol refers to vitality/viability of town centres. No 5 Health & Equality – first symbol refers to regeneration/deprivation & equality; second symbol refers to Green Infrastructure for health & well-being; No 9 Water – first symbol refers to water resources; second symbol relates to water quality No 11 Soil & Land – first symbol refers to greenfield & agricultural land qualities; second symbol relates to previously developed land

Potential Approaches for Distributing Development Growth	
1	New Settlement (village scale) – assumed to be between 2,000 to 5,000 new homes
2	New Settlement (town scale) – assumed to be between 7,000 to 10,000 new homes
3	Village Extensions – especially those with services & facilities
4	Growth in Transport Corridors – north-south ((A1 & East Coast Main Railway Line); north-south (M1 & Midland Main Railway Line); east-west (A421 & proposals for East-West Railway)
5	Urban Extensions – assumed for extensions 1,500-2,000 (& up to 4,000) new homes & for the larger settlements
6	Urban Intensification around Transport Hubs – especially for settlements with railway stations, bus stations, and park & ride
7	Higher Densities – development offering from 75 to 130 dwellings per hectare (compared to typical densities in England of 30-40 dph)

SA Topic	SA Objective & Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Approaches for Distribution of Growth						
		1 New Settlements (village scale)	2 New Settlements (town scale)	3 Village Extensions	4 Transport Corridors	5 Urban Extensions	6 Intensification at Transport Hubs	7 Higher Densities
1. Housing To ensure that the housing needs of all residents and communities are met	To ensure that the housing needs of all residents and communities are met	++?	++?	+	++?	++?	++?	++?
	All the options have the potential for positive effects but there is some uncertainty about whether each option could provide sufficient housing to meet identified needs of all communities within the Plan area and/or housing needs outside the Plan area. The greater scale of new development in Options 1,2, 4, 5, 6 & 7 for new settlements, transport corridors, urban extensions and higher densities is more likely to have major positive effects that will be cumulative in the longer term. For Option 3 village extensions, positive effects may only be minor since it is less clear that the scale of the identified need could be delivered. All the options could provide an appropriate mix of types of housing but this is more likely to be deliverable with more certain major positive effects for larger scale growth that is indicated by Options 1, 2, 5 & 7. The scale & scope of a new settlement or urban extension is more likely to have major positive effects for affordable & adaptable housing (including self-build, key workers & starter homes) which are critical issues for the CBC area. Development Management Policies are drafted and include specific housing requirements for starter, affordable, and supporting older people – these provide mitigation measures to help ensure that the mix of housing will be implemented with cumulative positive effects in the longer term. Option 2 with a town scale new settlement is more likely to offer more certain & a wider range of housing. All the options could offer an opportunity to help meet housing needs arising from outside the Plan area but uncertainty at this stage of sustainability assessment as effects depend upon proposals and specific locations.							

2. Communities To maintain and enhance community and settlement identities	To maintain and enhance community and settlement identities	+	+	-?	+	?	+	+	?
	The scale and scope of new settlements and urban extensions for Options 1,2 & 5 respectively can promote new thriving & inclusive communities through good & early design with positive effects. Urban extensions at the larger settlements are also more likely to be able to integrate with existing communities. The ability of villages to accommodate development growth for Option 3 is uncertain – potential negative effects for existing communities may be mitigated through reducing the number of new homes proposed; positive effects may be possible as new residents can invigorate or enhance communities – depends on scale & location. Similar effects are indicated for Options 4 & 6 for growth in transport corridors to the east (Area B) and north (Areas C & D) – uncertainty at this stage of SA as depends upon scale & location. The key transport corridors to the south and west (Area A) pass through Green Belt land with the potential for negative cumulative effects. Higher density development in Option 7 can promote new thriving & inclusive communities through good & early design with positive effects, as with each option; effectiveness of integration within existing settlement patterns is uncertain at this stage as depends upon precise location. Higher densities in the Luton area may facilitate opportunities for Luton's unmet need in areas that only weakly contribute to Green Belt aims or avoiding Green Belt land – with positive effects. Major development in Area A for all the Options will result in loss of the Green Belt (GB) with potential major cumulative negative effects for identity and coalescence of existing settlements without significant landscape buffering. However, the recent Green Belt Study¹⁵ has identified those areas that only weakly contribute to GB aims, including areas adjacent to the Luton Council area – therefore, potential for neutral effects but uncertainty as depends upon scale and the precise location of potential development sites. All the options have the potential for negative and/or positive effects with regard to integration and the identity of a settlement or community – uncertainty at this stage as this depends upon the sensitivity of the settlement/community and the scale/design of the development proposal. Whilst smaller developments might seem to be more readily integrated, larger developments can be more creative in scope and design offering enhancements to existing								

¹⁵ LUC for Central Bedfordshire Council (September 2016) Green Belt Study

	communities. This is acknowledged by Government, for example, with regard to the recent call for interest in locally-led garden villages ¹⁶ .						
3. Services & Facilities	To improve accessibility to services and facilities¹⁸.	++?	++?	++?	++?	++?	++?
To improve accessibility to services and facilities ¹⁷	All new development can ensure that there are no negative effects on existing facilities & services and all could have the potential to improve provision & accessibility. Options 1, 2, 5, 6 & 7 with major developments have the potential for major negative effects on services; they also have the greater potential for major positive effects through early, creative masterplanning with the scale/scope to provide sustainable community infrastructure. The new settlements indicated in Options 1 & 2 are likely to have requirements for new infrastructure that will have a long lead-in time so positive effects are likely in the longer-term. It is assumed that the scale of any new development as village extensions would be less than other options (acknowledging the likely limited capacity of villages) and likely to be at least less than 1000 new homes such that effects will be reduced – both positive and negative. A Development Management Policy: Provision for Social & Community Infrastructure is being drafted for the Local Plan – developers will be required to deliver new facilities & services taking an integrated approach, ensuring timely delivery, and applying the principles of multi-functional space. This will provide mitigation measures for potential negative effects associated with the capacities of existing settlements to accommodate the additional growth - but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location. Strategic Growth Locations for development and then potential allocation sites will be investigated, including testing through SA; further mitigation measures will be developed for any negative effects identified – through Policy and site specific requirements – and to consider opportunities for enhancing potential positive effects – but uncertainty remains at this stage of assessment until the further studies are completed at the next stage of plan-making.						

¹⁶ <https://www.gov.uk/government/publications/locally-led-garden-villages-towns-and-cities>

¹⁷ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

¹⁸ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

4. Employment To support the economy and ensure that there are suitable opportunities for employment	To support the economy and ensure that there are suitable opportunities for employment	+?	+?	-?	++?	+?	+?	?
	All the options have the potential to provide a range of employment opportunities that are suitable for the skills of the workforce and will help to meet the identified needs of the communities – uncertainty remains at this strategic stage of assessment. Larger areas, & including adjacent to existing larger settlements, tend to provide more sustainable employment to meet the needs of existing businesses, to attract future inward investment, and to be more resilient to change – with potential positive effects indicated for Options 1,2, 4, 5 & 6. The limited scale for employment land opportunities through village extensions in Option 3 will not support the economic focus for larger warehousing facilities that must have good accessibility to transport corridors – potential for negative effects. Conversely, this indicates potential major positive effects for Option 4, particularly in Area C to the north west, Area B with the north-south corridor to the east, and Area A to the south east with London Luton Airport, including a new 24-hour light rail link between the railway station and the terminal. Uncertainty remains as depends upon precise locations. There is some potential for medium scale employment growth along the major transport corridor following the M1, A5 and the railway with positive effects for meeting employment needs of communities in Area A, particularly for Dunstable with higher rates of unemployment. Potential for minor positive effects for Options 4, 5 & 6 - but uncertainty at this stage. It is unclear how higher densities in Option 7 would affect the economy & employment with uncertainty at this stage of SA. Options 4, 5 & 6 offer opportunities to support and enhance the vitality and viability of town centres with the potential for positive effects but uncertainty at this stage as depends upon precise location. Development Management Policies on Employment Sites & Uses are being drafted for the Local Plan, including proposed strategic site allocations and guidance on use. These will provide mitigation measures but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location. Strategic Growth Locations for development and then potential allocation sites will be investigated, including testing through SA; further mitigation measures will be developed for any negative effects identified – through Policy and site specific requirements, and including possibilities for enhancement of positive effects.							

5. Health & Equality	To improve the health and wellbeing of communities and reduce inequalities	++?	++?	+?	+?	++?	+?	+?
To improve the health and wellbeing of communities and reduce inequalities	All options have the potential for improving health and well-being through provision of Green infrastructure (GI), open space & recreation but this is more likely to be implemented through the scale and scope of the larger developments that are indicated for Options 1, 2 & 5 with major cumulative positive effects in the longer term. Careful and creative masterplanning will be needed to ensure that there are no negative effects for existing nearby communities and that opportunities for reducing any inequalities are identified. Uncertainty remains at this strategic stage. The approaches for Options 4, 5, 6 & 7 in Area A with its' communities of high deprivation¹⁹, particularly around Houghton Regis and the boundary with Luton, have the potential for major positive effects – but uncertainty as depends on size and precise location of development. Also, potential for positive effects for deprived communities in Luton (59 most deprived out of 326 authorities in England) – with identified needs outside the Plan area. Care would be needed to ensure that existing health facilities & green infrastructure (GI) have the capacity to accommodate increased numbers of people. The village extensions in Option 3 are assumed to be of less size than other options and thus with less effects likely – both positive and negative. Higher densities in Option 7 may have positive effects as open space & GI might be used more creatively, including roof & vertical wall gardens, but may have negative effects through limited capacity of open space due to higher numbers of people using the space and increased pressures on the multifunctionality of GI. Mitigation for potential negative effects has been demonstrated in city urban environments such as Hong Kong & Singapore, but effectiveness is less known applied to English rural areas such as Central Bedfordshire. Nonetheless, there could be opportunities for exemplar developments with creative design implementing sustainable development with potential positive effects. The scale and scope of major developments, including new villages & towns, can offer thresholds for sustainable development through creative masterplanning with major improvements/provision of health services and Green Infrastructure. The positive effects of green infrastructure on health is well evidenced²⁰. This is acknowledged by							

¹⁹ <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

²⁰ <http://planningguidance.communities.gov.uk/blog/guidance/natural-environment/green-infrastructure/> ; Also, guidance from Natural England, Landscape Institute, RTPI, TCPA and <http://www.centralbedfordshire.gov.uk/planning/green/plans.aspx>

	Government, for example, with regard to the ongoing trials for healthy new towns²¹ that are seeking to rethink how health and care services can be delivered. There are 2 demonstrator sites at Bicester, Oxon and Northstowe, Cambs and these may provide lessons learnt that could be applied to Central Bedfordshire. The higher numbers in Option 2 (town scale) could place higher pressures on GI but also might facilitate more creative masterplanning – uncertain at this stage until further studies undertaken. A Development Management Policy: Provision for Social & Community Infrastructure is being drafted for the Local Plan – developers will be required to deliver new facilities & services & Green Infrastructure. This will provide mitigation measures but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location.								
6. Highways & Air Quality	<table><tr><td>To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions.</td><td>+</td><td>+</td><td>--</td><td>-</td><td>0</td><td>0</td><td>+</td></tr></table>	To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions.	+	+	--	-	0	0	+
To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions.	+	+	--	-	0	0	+		
To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Strategic road links north-south are good but there are gaps for strategic movement east-west that will be improved with the A5-M1 link road²² and the potential Expressway. Long journey times exacerbated by high out-commuting are established characteristics for the Plan area. Whilst the LTP3 identifies several strategic transport schemes that are either planned or under construction, the identified need for development growth will place demands on the capacities of the highway networks with the potential for cumulative negative effects in both short and longer terms – particularly for Option 4 where growth would be concentrated along the transport corridors; uncertainty at this stage as depends upon further transport impact studies. New settlements through Options 1 & 2 have the potential for positive effects as they can be designed through creative masterplanning to minimise negative effects on the existing transport networks and contribute to resolving existing problems but may need major infrastructure investment with associated uncertainties of funding and timing – and depends on precise likely location. The higher housing numbers in Option 2 may exacerbate both negative and positive effects. Uncertainty at this stage of assessment until further site specific studies are undertaken. Mitigation measures are available by locating near a railway station and other sustainable transport modes to reduce the additional loading on the existing network. The scale of identified development growth spread around the larger villages in Option 3 is likely to have major negative effects on the transport network as the villages are characterised by their rural nature (and with limited								

²¹ <https://www.england.nhs.uk/ourwork/innovation/healthy-new-towns/>

²² Central Bedfordshire Local Transport Plan 3 (LTP3) 2011-2026

	sustainable transport services – see SA Objective No 7 following) – and this will be synergistic and cumulative in the longer term. Approximately 50% of residents commute for work to surrounding areas predominantly using private vehicles²³. Some mitigation is provided through focusing new development on those villages with services & facilities, thus reducing some need to travel, negative effects are still indicated unless employment is also provided and sustainable transport modes enhanced. Uncertainty remains until further locationally specific studies are undertaken. Urban Extensions as suggested through Option 5 have the potential to mitigate likely negative effects on the transport networks by careful masterplanning that minimises the need to travel by car because of the location of such developments adjacent to the larger settlements. The scale and scope of such developments is sufficient to support transport improvements with the potential for overall neutral effects – uncertainty at this stage as depends upon precise locations. Similarly, potential for neutral effects through Option 6 with urban intensification around transport hubs that should reduce the need to travel by car. The effects of Option 7 and the effectiveness of higher densities in maintaining the highway network is uncertain, although this could offer positive effects by reducing the need to travel (and please see SA Objective No 7 following). Effects on traffic and the highway network will have concomitant effects on air quality and greenhouse gas emissions. Significant negative effects are more likely to occur in the short-term as it is assumed that long-term air quality is likely to improve as a result of stringent emissions controls on new vehicles via European standards²⁴. In 15 to 20 years' time low emission vehicles will make up the majority of cars on the roads in the UK. It is also likely that there will be reductions in various contributing sectors that will also result in reductions in background concentrations of atmospheric pollutants. However, this is uncertain at this stage. These reductions in emissions, together with the potential improvements to strategic road infrastructure and public transport, could help to improve air quality – and contributions to climate change (please see SA Objective No 8). Particular consideration will be needed for Sandy, Ampthill and Dunstable that have Air Quality Management Areas designated primarily due to traffic. Development Management Policies are being drafted that specifically seek to mitigate transport impacts on the network, including requirements for a Travel Assessment and/or Travel Plan, and encouragement of low emission vehicles - this will provide more certainty of implementation of mitigation measures to reduce potential negative effects to neutral in the longer term. However, depends upon the overall scale and location of new development.
--	--

²³ ONS: Neighbourhood Statistics for Central Bedfordshire Local Authority

²⁴ <http://ec.europa.eu/environment/air/transport/road.htm>

7. Sustainable Transport	To encourage a demonstrable modal shift and reduce the need to travel	++?	++?	-?	++?	++?	++?	++?
To encourage a demonstrable modal shift and reduce the need to travel	Development within walking/cycling distance of mainline railway stations and services/jobs to discourage out-commuting will provide mitigation measures to reduce the potential negative effects.							
	Larger scale developments including those through Options 1, 2 & 5 have the scope for effective design and implementation of sustainable transport modes – cycling and walking – with the potential for major positive effects, especially if this can be linked into the limited networks available in the Plan area. Careful and early masterplanning will help to ensure that opportunities for a modal shift are progressed but uncertainty at this stage of assessment until further studies are completed. Larger scale development also offers the opportunity to support the delivery of proposed sustainable transport infrastructure such as the East-West Rail Link with major positive effects							
	The scale of potential growth in village extensions in Option 3 may not be sufficient to support new provision of sustainable transport modes. The villages are characterised by rural roads and limited sustainable transport modes; there is also an issue for the long distances needed to access services and facilities in the rural area, encouraging car use. Mitigation measures are possible by limiting new development to a size and location focused around settlements with existing services and suitable sites. Potential for minor negative effects but depends upon location specificity and uncertainty remains until further studies.							
	Option 4 with growth in transport corridors will encourage the use of railways with positive effects where development is focused near to railway stations. However, rail use has been increasing and is predicted to continue increasing, so there are likely to be issues for capacity in the longer term. Larger developments are more likely to be able to provide cycling/walking/bus links to railway stations with cumulative positive effects. Similarly, for Option 6 with urban intensification in settlements with railway stations.							
	The effects of Option 7 and the effectiveness of higher densities to offer positive effects by reducing the need to travel seems likely but some uncertainty at this stage of assessment. It has been found in the Netherlands ²⁵ that the success of high density development is closely linked to the effectiveness of public transport – not just provision but encouragement of use. The London Plan (2016) includes Housing Supplementary Planning Guidance ²⁶ that aligns densities of dwellings with public transport accessibility. This is likely to be more readily designed and implemented							

²⁵ For example, see: Paul Kuitenbrouwer & Raf De Saeger High-density, Low-rise – a challenge for Dwelling Landscapes in the Netherlands, Architectural Research by Design as a process towards incorporated typologies Conference paper for Housing & Welfare – Boundaries | Encounters | Connections, Copenhagen, 7-9 May 2015

²⁶ https://www.london.gov.uk/sites/default/files/housing_spg_final.pdf

	through new settlements & major extensions such as in Options 1, 2 & 5, and perhaps particularly in Area A around Luton with an established urban environment. Development Management Policies are being drafted that promote enhanced access to encourage more public transport use and ensure accessibility through realistic alternatives to use of the car – these will provide mitigation measures to reduce negative effects and confirm more certainty of potential positive effects for sustainable transport.						
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and withstand the effects of climate change ²⁷	To maximise the potential for energy efficiency, reduce greenhouse gas emission and withstand the effects of climate change	0?	0?	0?	0?	0?	0?
	All development has the potential for high energy efficiency and carbon neutrality but generally, the scale and scope of the larger developments, especially new settlements & urban extensions in Options 1,2 & 5, offer potential possibilities for exemplar design, construction & occupation, including local renewable energy schemes where appropriate. Potential for minor negative effects during the construction phases with potential for neutral or positive effects in the longer term but uncertainty at this stage of assessment for all the options.						
9. Water Resources &	To minimise the demand for water and maintain or improve water quality	0?	0?	0?	0?	0?	0?

²⁷ Please note that Flood Risk is considered by the SA within objective number 10

Quality To minimise the demand for water and maintain or improve water quality	All development has the potential for high water efficiency and water neutrality but generally, the scale and scope of the larger developments, especially new settlements & urban extensions in Options 1, 2 & 5, offers potential possibilities for exemplar design and construction including local water reuse/recycling schemes where appropriate. This is particularly relevant in the Anglian Water region with issues for water resources – high population and relatively low rainfall. The Anglian area is known to be under water resources stress²⁸ but water companies are under a statutory obligation to provide potable water regardless of the level of development growth. This has implications for the timing of necessary infrastructure – for water resources, wastewater treatment & the associated sewerage network. Some issues have already been identified with regard to the capacity of wastewater facilities at Chalton WWTW²⁹. Uncertainty at this stage of assessment until more locational specificity and further studies are undertaken including the Water Cycle Study Stage 2. Development Management Policies to protect environmental resources, including water quality, are being drafted for the Local Plan. These will provide mitigation measures with likely residual neutral effects for both water resources & water quality, but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location.						
10. Flood Risk To reduce the risk of flooding from all sources	To reduce the risk of flooding from all sources						
		0?	0?	0?	0?	0?	0?
	A Development Management Policy on Flood Risk is being drafted for the Local Plan in line with Government legislation & guidance to avoid & reduce flood risk. This will provide mitigation measures with resultant neutral effects but still some uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location. The larger developments, including new settlements and Urban Extensions in Options 1, 2 & 5, have the scale and scope to provide creative design and potentially contribute to resolving existing flood risk issues – however, uncertain until further studies such as the Water Cycle Stage 2, and depends upon location. Higher densities in Option 7 may reduce the potential risks of flooding through less land take & less run-off compared to other options.						

²⁸ Anglian Water, Water Resources Management Plan 2014

²⁹ JBA for Central Bedfordshire Council (Jan 2017) Water Cycle Study Stage 1

11. Soil To protect and conserve soil	To protect and conserve soil	-	-	-	-	-	-	-?
	The Plan area is predominantly rural and Defra identifies small pockets of best and most versatile agricultural land situated largely around the borders of the Plan area, particularly surrounding Bedford and Milton Keynes, and an area surrounding Biggleswade³⁰. However, most rural land is greenfield and less important agricultural land Grade 3b-5. All development will take land and the soil resource will be lost with permanent negative effects. However, mitigation is available by avoiding the best and most versatile agricultural land resulting in residual minor effects. The scale and scope of larger developments in Options 1, 2 & 5 tend to offer possibilities for higher densities of housing and the potential for soil/greenfield enhancement through Green Infrastructure networks, together with possibilities for allotments and community gardens. The higher densities for Option 7 offer mitigation measures by reducing land take for new development and potentially reduced negative effects on the soil resource but uncertain at this stage until further studies and precise locations indicated.							
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	To protect, enhance and manage biodiversity & geodiversity	0?	0?	0?	0?	0?	0?	0?
	There are no European designated sites³¹ within the Plan area although there are several outside the area and potentially within the Plan's influence. There are nationally and locally important sites for biodiversity and geodiversity. Development Management Policies on Green Infrastructure, Enhancing Ecological Networks and Nature Conservation are being drafted for the Local Plan and these will avoid important assets & thus avoid any significant negative effects. These Policies will provide mitigation measures with resultant potential neutral effects but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development, the precise location and the importance/sensitivity of local biodiversity & geodiversity. The larger developments, including new settlements & urban extensions as in Options 1, 2 & 5, have the scale and scope to provide creative design and contribute to enhancement of green infrastructure and ecological networks –							

³⁰ Defra Magic Map Application

³¹ Habitats Regulations Assessment for Central Bedfordshire Local Plan (2014)

	however, uncertainty until further studies and depends upon location. Opportunities for resolving existing problems and promoting aspirations for enhancing local biodiversity can be identified through the Environmental Framework³². Higher densities in Option 7 may reduce the potential risks of negative effects on locally important biodiversity through less land take & creative Green Infrastructure, such as is established in major urban areas, for example, including Singapore³³, indicating opportunities for mitigation and enhancement.							
13. Landscape Protect and enhance the landscape and townscape	Protect and enhance the landscape and townscape	-	-	--?	-	-	-	-?
	All development has the potential for negative effects on landscape and townscape – and this may be particularly significant for the Plan area with its' predominantly rural character with larger areas of flat land and high levels of tranquillity. Vulnerability and sensitivity to change have been identified³⁴ for a number of settlements – this will be taken into account in further studies such that potential major negative effects may be reduced to minor negative effects. Extensions to the larger villages through Option 3 may have the potential for more major negative effects as it may be more difficult to mitigate the cumulative effects throughout the dispersed and rural landscape of the area – depends upon scale and location of proposed development & uncertainty at this stage until further detailed studies including possibilities for local mitigation are undertaken. The larger developments in Options 1, 2 & 5 may have the potential for greater negative effects but also have the opportunity for more creative design and mitigation through careful early masterplanning. Higher densities in Option 7 can reduce land take with less negative effects dispersed through the landscape but uncertain at this stage as depends upon precise location and design factors. Development Management Policies on Landscape Character & Value are being drafted for the Local Plan and these will avoid important assets and settings to avoid negative effects. They will provide mitigation measures but with likely potential cumulative negative effects overall due to the overall quantum of new development; however, still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location.							
14. Historic	To ensure the protection and enhancement of heritage assets,							

³² <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

³³ For example, see (Jan 2014), The Role of Green Infrastructure in the Sustainable City: A vision for Singapore, workshop hosted by Centre for Urban Greenery & Ecology

³⁴ LUC for Central Bedfordshire Council, Landscape Character Assessment (2016)

Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	the historic environment and its setting	0?	0?	0?	0?	0?	0?	0?
	The Plan area has a rich historical heritage with nationally and locally important assets. Development Management Policies on the Historic Environment are being drafted for the Local Plan and these will avoid important assets and settings to avoid any major negative effects. They will provide mitigation measures with the potential for residual and cumulative neutral effects - but still uncertainty for the SA at this stage as effects will depend upon the scale/scope of development and the precise location.							

Appendix IV: Strategic SA of Growth Scenario Options

Key:

Categories of Significance		
Symbol	Meaning	Sustainability Effect
++	Major Positive	Proposed development encouraged as would resolve existing sustainability problem
+	Minor Positive	No sustainability constraints and proposed development acceptable
0	Neutral	Neutral effect
?	Uncertain	Uncertain or Unknown Effects
-	Minor Negative	Potential sustainability issues: mitigation and/or negotiation possible
--	Major Negative	Problematical and improbable because of known sustainability issues; mitigation likely to be difficult and/or expensive
-	+	SA Objectives 2, 4, 5, 9 & 11 consider more than one sub-topic such that more than one significant effect may be predicted with two symbols. No 2 Communities – first symbol refers to in/out of Green Belt; second symbol refers to community & settlement identities No 4 Employment – first symbol refers to employment support; second symbol refers to vitality/viability of town centres No 5 Health & Equality – first symbol refers to regeneration/deprivation; second symbol refers to Green Infrastructure for health & well-being No 9 Water – first symbol refers to water resources; second symbol relates to water quality No 11 Soil & Land – first symbol refers to greenfield & agricultural land qualities; second symbol relates previously developed land

	Growth Scenario Options Potential Housing Numbers				
	1	2	3	4	5
Area A					
North of Luton	4,000	4,000	4,000	0	4,000
Green Belt Villages	2,000	2,000	2,000	0	3,000
West of Luton	2,000	0	2,000	0	0
Area B					
Tempsford	7,000	7,000	0	7,000	0
East of Biggleswade	3,000	0	0	3,000	0
Biggleswade			500		
East of Arlesey	2,000	2,000	2,000	2,000	2,000
Villages	0	0	500	0	2,500
Area C					
Marston Vale	5,000	5,000	5,000	5,000	5,000
Apsley Guise	3,000	3,000	3,000	3,000	0
Wixams South	1,000	1,000	1,000	1,000	1,000
Villages	0	0	0	0	650
Area D					
RAF Henlow	1,000	1,000	1,000	1,000	1,000
Villages	500	500	500	500	1,500
Totals	30,500	25,500	21,500	22,500	20,650

Please note that these potential numbers for housing reflect the potential full capacity for development. Since enabling infrastructure for the larger strategic areas may not be achievable within the 20-year plan period, only a proportion of the overall capacity figures for new homes may be taken forward. This first draft CBLP only considers Growth Locations that are typically of a strategic scale (more than 1,000 new homes).

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
1. Housing To ensure that the housing needs of all residents and communities are met	Options 1, 2, 3, & 5 have the potential for significant positive effects through the delivery of housing to meet the needs of all residents and communities. The greater the total number of dwellings the more significant these positive effects are considered to be i.e. the higher growth in Scenario 1 is considered to have the potential for the most significant positive effects for this SA Objective. Option 4 however fails to meet the housing needs of the residents and communities located in the southern half of the Borough (the Green Belt), as well as the cross-boundary needs of Luton under the Duty to Cooperate in what could be considered reasonable locations to meet Luton Council's needs. This is considered to have the potential for minor long term negative effects. Draft Local Plan policies (Housing Mix, Housing Standards, Affordable Housing, Starter Homes, and Self and Custom Build Housing) should ensure that all options deliver a range and appropriate mix of types and tenures of housing to meet local needs and aspirations.	++	++	++	-	++

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options									
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500					
2. Communities ³⁵ To maintain and enhance community and settlement identities.	Options 1, 2, 3 & 5 all have the potential for significant growth within the Green Belt and thus significant negative effects that will be cumulative in the longer-term. The recent Green Belt Study ³⁶ however has identified areas of land which are considered to weakly contribute towards Green Belt purposes, and the direction of development towards these areas has the potential to reduce the extent of the identified negative effects. Reducing the size of potential growth to small-medium (<500-1000 new homes) also provides mitigation measures but this remains uncertain at this stage of assessment as it depends upon the precise location of development sites. Option 4 avoids any development within the Green Belt and the associated negative effects; at this strategic level of assessment, minor positive effects for this SA objective. However, uncertainty as these communities would not then benefit from the positive effects of development – new residents can revitalise communities.	--?	++?	--?	++?	--?	++?	--?	++?		

³⁵ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

³⁶ LUC for Central Bedfordshire Council (September 2016) Green Belt Study

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	For all the options, there is the potential for negative effects through coalescence of settlements, but these effects can be avoided through the appropriate sizing & siting of development – uncertainty at this stage of assessment until more information & precise locations. Emerging Strategic Policies are likely to guide and manage development growth to avoid coalescence or loss of identity. There is the potential for minor negative effects through loss of identity & integration for new communities with existing settlements. Mitigation is possible through careful sizing & siting of development. Options 1,2 & 4 include potential new settlements in Area B that provide mitigation measures by reducing the development pressures on the identity of other settlements & less issues for integration with existing communities – potential for major positive effects for Options 1 & 2 - but uncertain at this stage. New settlements offer opportunities for creating thriving & inclusive communities through good & early design with positive effects for identity. The lower overall housing numbers in Options 3, 4 & 5 will					

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	reduce the likelihood of significant negative effects on integration & identity compared to the other options. However, Option 5 includes significantly higher growth (2,500 vs 500) for villages in Area B with the potential for negative effects. Focusing development in urban extensions to the east of Biggleswade as in Options 1, 4 will help reduce the likelihood of significant negative effects on the villages, compared to Option 3. Option 5 also has more growth (3000 vs 2000) in Area A compared to other options, thus overall, Option 5 has potential for major negative effects – but some uncertainty at this stage of strategic assessment.					
3. Services & Facilities To improve accessibility to services and facilities ³⁷ .	All the growth options propose significant levels of growth that could support the delivery of new services and facilities with the potential for long-term positive effects. The extent of the positive effects will vary depending on the scale of development at individual settlements, and there remains an element of uncertainty until precise locations are determined. Edge of settlement	++?	++?	++?	++?	++?

³⁷ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	development at a smaller scale, for example, has the potential for minor negative effects on existing services and facilities, however these effects can be avoided or minimised through appropriate siting and scale. There may be issues for timing and phasing of delivery of services & facilities but mitigation can be provided through strong policy requirements set out in the next draft of the CBLP for proposed strategic site allocations policies. Draft Local Plan policies (Provision for Social and Community Infrastructure and Indoor Sport and Leisure Facilities) also reduce the potential for negative effects by seeking to ensure that new development provides for new social and community infrastructure that integrates well with the existing urban area. Option 4 however avoids development in the south of the Plan area which indicates that there will be little change to the accessibility to services and facilities for many communities in this area. This may indirectly exacerbate existing sustainability issues such as areas of high deprivation where communities have poor access to existing services and facilities – with negative effects					

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	for Area A thus reducing the overall likely significant positive effects for the whole of the area and in consideration of unmet need from Luton Borough. Option 5 includes more growth (3000 vs 2000) for villages in Area A; this is unlikely to be at sufficient scale to support significant services & facilities so positive effects also reduced to potentially minor for this option. Options 1, 2 & 4 with new settlements offer the scale & scope for major positive effects that will be cumulative in the longer term. However, and with the higher quanta of development for Option 1, strong planning requirements will be needed in specific policy at the next CBLP draft to ensure timely & good provision of services & facilities to guide masterplanning. So, some uncertainty remains at this stage.					
4. Employment To support the economy and ensure that there are suitable opportunities for employment.	Options 1 & 4 direct higher levels of new development to Area B. The potential for improvements to rail and strategic road connections in this area supports access to strategic employment areas, particularly in London. Focusing the growth at Tempsford and Marston Vale capitalises on opportunities to sustainably connect this area with major employment areas in the west (e.g.	++	++	+	+	+

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	Milton Keynes) with the future development of the East-West rail, with the potential for major long-term and cross-boundary positive effects. Option 3 directs significantly less development towards Area B, along with Option 5; these Options deliver no new development at Tempsford, failing to capitalise on opportunities to improve East-West connectivity in Area B. Although the Options do still provide significant growth in Area C which can support improved connectivity, particularly to nearby major employment area Milton Keynes – overall minor positive effects. Option 4 avoids development in the south of the Plan area and thus fails to capitalise on opportunities to connect development to the Midland Main railway line and increase accessibility to significant employment areas in this respect – with reduced positive effects overall. Option 5 directs most development within the Green Belt. This area is well connected to strategic employment areas via the Midland Main railway line and in its proximity to both Luton and Milton Keynes. The option					

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	however directs less development to Areas B and C compared to the other options – overall minor positive effects likely. Options 1 & 2 distribute growth in a manner which seeks to capitalise on opportunities to improve East-West connections in both Areas B and C, as well as significant growth in Area A supporting existing strategic connections to the Midland Main railway line and Luton and Milton Keynes – with major positive effects likely overall for CBC. All the options 1-5 capitalise on opportunities to sustainably connect with major employment areas with EWR (due to proximity of Ridgmont Station, in CBC, which will be the location of a EWR station connecting to the Western Section) with the potential new settlement (5000) at Marston Vale in Area C with major positive effects. Strategic level sites would not only potentially improve access and connectivity to employment areas but as they are large scale they would be mixed-use and so also provide employment areas with positive effects but					

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	some uncertainty still at this stage of assessment as depends upon precise locations. No town centre comments and this section not split like other appraisals? Might not be needed here?					
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities.	All the options have the potential to deliver investment and regeneration in areas of deprivation with the potential for long term positive effects. Most areas of highest deprivation in Central Bedfordshire however are largely located in the south ³⁸ (around Dunstable and Houghton Regis, in Flitwick, Caddington and Leighton Buzzard North). As Option 4 avoids any development in the south of the Plan area it is less likely to result in significant positive effects and fails to capitalise on opportunities to address inequalities. All the options have the potential to support investment and improvement in priority GI corridors; however, Option 4 again by avoiding development in the south of the Plan area is less likely to distribute these gains across the Plan area and reduce inequalities in this respect with only neutral effects indicated for the Borough overall.	++	++	++	0	++

³⁸ <http://www.centralbedfordshire.gov.uk/council/census/deprivation.aspx>

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions.	Effects at this stage remain largely uncertain. Long journey times exacerbated by high out-commuting are established characteristics for the Plan area. Major growth in all scenarios would need to be associated with jobs to minimise increased out-commuting. Likely cumulative negative effects but uncertain at this stage. Options 3 and 5 do not deliver growth at Tempsford and thus fail to capitalise on opportunities to connect development to the future East-West rail line, and thus support a modal shift that can reduce stress on the highway network. Option 4 avoids development in the south of the Plan area and thus fails to capitalise on opportunities to connect development to the strategic Midland Main railway line and support a modal shift in this respect. This could potentially exacerbate stress on the highway network through increased development in less strategically connected locations. Option 1 with a higher quantum of proposed development - there could be a likelihood of more significant negative effects – but this is mitigated by the	-?	-?	-?	-?	-?

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	inclusion of new settlements (as with Options 2 & 4) that will have the scale & scope for enabling infrastructure including potential for contributing to highway infrastructure. Effects on traffic and the highway network will have concomitant effects on air quality and greenhouse gas emissions. Significant negative effects are more likely to occur in the short-term as it is assumed that long-term air quality is likely to improve because of stringent emissions controls on new vehicles via European standards³⁹. In 15 to 20 years' time low emission vehicles will make up most cars on the roads in the UK. It is also likely that there will be reductions in various contributing sectors that will also result in reductions in background concentrations of atmospheric pollutants. However, this is uncertain at this stage. Particular consideration in all Options will be needed for development in and around Sandy, Dunstable (e.g. Luton North and Houghton Regis) and Ampthill (e.g. Flitwick) which have Air Quality Management Areas					

³⁹ <http://ec.europa.eu/environment/air/transport/road.htm>

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	designated primarily due to traffic, and new development could provide the opportunity to help resolve an existing sustainability problem.					
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel.	Options 1 & 2 seek to deliver development in all Areas and capitalise on opportunities to support a modal shift. For example, through strategic growth in Area A which is well connected to the Midland Main railway line, and strategic growth in Areas B and C which will support improved sustainable East-West connections in the future development of the East-West rail. Options 3 and 5 do not deliver growth at Tempsford and thus fail to capitalise on opportunities to connect development to the future East-West rail line, and support a modal shift in East-West movement across the north of the Plan area. Option 4 avoids development in the south of the Plan area and thus fails to capitalise on opportunities to connect development to the strategic Midland Main railway line and support a modal shift in this respect.	++?	++?	-	-	-?

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	Option 5 disperses a larger proportion of development across village locations, which are less likely to support viable public transport services. New development in village locations has the potential to both exacerbate a reliance on the private vehicle in this respect with negative effects, and support investment and improvement in public transport services to make them more viable with positive effects. At this stage the overall effects are uncertain. Option 1 has a higher quantum of development than other options but includes new settlements that will have the scale & scope to provide exemplar sustainable transport that could benefit the wider areas in B & C. Potential for major positive effects but uncertain as depends on further studies.					
8. Energy & Climate Change	All the options present opportunities to deliver energy efficient development that can withstand the effects of climate change with the potential for long term positive effects. This is supported by strong policy mitigation	+	+	0?	+	0?

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ⁴⁰ .	provided through Local Plan policies (Successful and Sustainable Places, Modern Methods of Construction, Climate Change and Sustainability and Renewable Energy Development) which seek to deliver high levels of efficiency as well as maximise opportunities for climate change mitigation and adaptation. Although there is the potential for large scale development schemes to deliver carbon neutral development or renewable energy gains in each option, it is recognised that this is largely dependent on the precise location and masterplan or design scheme and so remains uncertain at this stage. The potential for minor short-term negative effects during construction phases can also be minimised through site level mitigation, for example, through a requirement for Construction Environmental Management Plans. Options 3 and 5 have less large scale developments (of over 5000 homes) and as such are less likely to deliver					

⁴⁰ Please note that Flood Risk is considered by the SA within objective number 10

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	positive effects compared to other options, on the assumption that larger scale development has greater potential for renewable energy technology and production - but with uncertainty at this stage of assessment. Options 1, 2, & 4 include new settlements with the scale & scope to deliver energy efficiencies (including exemplar) with more certainty of positive effects.					
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality.	Development across all the options has the potential for high water efficiency and water neutrality. Each scenario option contains large scale developments in which exemplar design and construction with water efficiency schemes can be promoted (e.g. water reuse/recycling schemes). This can support the objectives of the relevant WRMPs and measures to address current / predicted deficits in the water supply-demand balance in both Ruthamford South Water Resource Zone (WRZ) and Lee WRZ. Most watercourses in Central Bedfordshire are not currently meeting an overall 'good' classification for water quality, most are considered 'moderate'. The most common Reason for Not Achieving Good Status (RNAG)	0?	0?	0?	0?	0?

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	is 'pollution from waste water' impacting 22 of the 32 watercourses. The Water Cycle Study⁴¹ identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, reflecting the limited dilution potential available in the receiving watercourse, and in cases of large scale development WwTW upgrades may also be required. All options include large scale development and thus may require water infrastructure investment to avoid negative effects on water quality – uncertainty at this stage of assessment & there may be issues of timing for enabling infrastructure that needs to be considered – when the next stage of the Water Cycle Study is completed. Draft Local Plan policies (Climate Change & Sustainability, Flood Risk Management, Sustainable Drainage, Water Quality and Pollution) seek to maintain and improve the water environment, and ensure that new development does not exacerbate the existing water constraints in the Plan area, e.g. high population					

⁴¹ JBA for Central Bedfordshire Council (Jan 2017) Water Cycle Study Stage 1

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	and relatively low rainfall in the Anglian water region, as well as ensuring new development has no adverse impact on the quality of waterbodies or prevent future attainment of good status. The policies seek to deliver high levels of water efficiency in new development (Policy Climate Change & Sustainability seeks to deliver a 110l/person/day standard) which will support the objectives of WRMPs. Strong policy mitigation should ensure at least neutral effects are achieved across all options, however there remains an element of uncertainty until site level assessments have been completed. Option 1 has a higher quantum with likelihood of more pressures on capacities but also include new settlements (as do Options 2 & 4) that will have the scale & scope for water efficiencies & exemplar sustainable water management.					
10. Flood Risk To reduce the risk of flooding from all sources.	All Options are likely to result in neutral effects against SA Objective 10 given the strong policy mitigation provided through the draft Local Plan (Flood Risk Management). Draft Local Plan policies (Flood Risk Management, Successful and Sustainable Places and Sustainable	0	0	0	0	0

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	Drainage) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but this is uncertain at this stage of appraisal.					
11. Soil To protect and conserve soil.	The Plan area is predominantly rural and there are areas of best of most versatile agricultural land, particularly around Biggleswade and Marston Moretaine. Options 2 and 5 avoid development around Biggleswade, however all options include a large development at Marston Vale which is likely to result in the loss of best and most versatile agricultural land (Grade 2) with permanent major negative effects. It is recognised however at this stage that there is an element of uncertainty until the precise location of development has been determined & possibilities for mitigation are investigated. Development at the rest of the locations in each option is likely to result in the loss of greenfield land with permanent negative effects. However, there are also likely to be opportunities in each option for	--?	--?	--?	--?	--?

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	soil/greenfield enhancement through Green Infrastructure investment and provisions including allotments and community gardens. Larger developments may also offer opportunities for higher densities of housing that may provide some mitigation by reducing the amount of soil/land taken.					
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity.	There are no European designated sites within the Plan area although there are several outside the area and within the Plan's influence. There are nationally and locally important sites for biodiversity and geodiversity, including the Greensand Nature Improvement Area (NIA) stretching across the Plan area in a north-east/south-west direction. All options include some development within the NIA and such development should have the potential to contribute to biodiversity improvements in this area. It is considered that strategic level development within each option has the potential to contribute to ecological networks and overall biodiversity connectivity through investment and new provisions. Option 5 with less strategic locations and more growth in villages may offer less opportunities, so only uncertain neutral effects	+	+	+	+	0

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	indicated at this stage. Draft Local Plan policies (Green Infrastructure, Enhancing Ecological Networks, Nature Conservation, Trees, Woodlands and Hedgerows, Greensand Ridge Nature Improvement Area, Forest of Marston Vale, The Bedford & Milton Keynes Waterway Park, Development Close to Watercourses) seeks to protect designated biodiversity and to ensure that all new development positive contributes to biodiversity networks. Given the potential opportunities and strong policy mitigation it is considered that each option has the potential for minor long term positive effects with an element of uncertainty until lower level assessments have been completed.					
13. Landscape Protect and enhance the landscape and townscape.	All Options have the potential for negative effects on landscape and townscape. This may be particularly significant for the Plan area with its predominantly rural character including large areas of flat land and high levels of tranquillity. Option 4 avoids development in the south of the Plan area and thus largely avoids the potential for significant negative effects on the designated AONB landscape.	-?	-?	-?	-?	-?

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	Options 1, 2, 3, & 5 are likely to affect the designated AONB landscape to some degree, particularly through development North of Luton and in some of the Green Belt villages (including Barton-le-Clay, Caddington, Slip End, Harlington and Westoning). Mitigation is provided through draft Local Plan policies (Trees, Woodlands and Hedgerows, Landscape Character and Value, Tranquillity, The Chilterns Area of Outstanding Natural Beauty, Greensand Ridge Nature Improvement Area, Forest of Marston Vale, and Outdoor Sport, Leisure and Open Space) which seek to protect designated landscapes, and the landscape qualities of the Plan area. However, these options are still likely to negatively affect the landscape to some degree given that there will be development in previously undeveloped areas. The effectiveness of potential mitigation measures is unknown at this stage of assessment until further more locationally specific studies are undertaken. Options 1 has a higher quantum of development with likely more significance of negative effects but this may be mitigated through the inclusion of new settlements (as with Options 2 & 4) that have the scale & scope for exemplar design – uncertain at this stage until further					

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	Growth Scenario Options				
		1. 30,500 new homes Areas: A 8000; B 12000; C 9000; D 1500	2. 25,500 new homes Areas: A 6000; B 9000; C 9000; D 1500	3. 21,500 new homes Areas: A 8000; B 3000; C 9000; D 1500	4. 22,500 new homes Areas: A 0; B 12000; C 9000; D 1500	5. 20,650 new homes Areas: A 7000; B 4500; C 6650; D 2500
	studies are completed.					
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting.	The Plan area has a rich historical heritage with nationally and locally important assets. Many of the settlements in Central Bedfordshire contain Conservation Areas as well as Archaeological Notification Areas. There is significant potential to increase archaeological knowledge of the Plan area through surveys and investigations in development in areas which include Archaeological Notification Areas across all the scenario options. Draft Local Plan policies (Archaeology, Historic Parks and Gardens, and Built Heritage) seek to avoid negative effects arising on designated and non-designated heritage assets and their settings, as well as promote sensitive and responsive design that enhances heritage settings and historical understanding and appreciation. It is considered that this policy mitigation should ensure at least residual neutral effects, however there remains an element of uncertainty until lower level assessments have been completed.	0?	0?	0?	0?	0?

Growth Scenario Options: Employment

	Strategic Employment Scenarios (numbers of jobs)	
	1	2
Area A		
Sundon Rail Freight Interchange	2,300	0
Area B		
Biggleswade, West of A1	2,000	2,000
Area C		
M1 Junction 13	1,700	1,700
Area D		
	0	0
Total Numbers of Jobs	6,000	3,700

		Employment Growth Scenario Options			
SA Objective	Assessment of Effects	Scenario 1:	Scenario 2:		
	Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	6,000 New Jobs	3,700 New Jobs		
1. Housing To ensure that the housing needs of all residents and communities are met	This assessment is considering employment growth scenario (in terms of overall provision) and so housing is not considered, although there would be synergies with housing provision in and proximate to the Growth Locations (through providing employment opportunities for residents). Likely neutral effect.	0	0		
2. Communities⁴² To maintain and enhance community and settlement identities.	Both scenarios include development in areas that are unlikely to adversely affect settlement identities. The provision of additional employment may have significant benefits for residents in terms of choice and opportunities directly associated with the sites and in the wider local and sub-regional economies. The Sundon Growth Location would involve development within the Green Belt and so Scenario 1 would be likely to have a minor negative effect compared with Scenario 2 (although the site is located adjacent to the railway line and M1 and effects on openness may be limited – the contribution of the site to the functions of Green Belt would need further review).	-	+	+	+
3. Services & Facilities To improve accessibility to services and facilities ⁴³ .	Increasing employment may put pressure on existing services, but also provide increased patronage improving their viability, and provision of additional and sufficient services in conjunction with employment development is likely to be possible at all sites and for both options. Sundon is close to Luton and its services, and to Harlington and Leagrave rail stations, and increased employment may help to improve the quality of services associated with Scenario 1. Similarly, increased employment provision at Biggleswade would be expected to have similar wider benefits in terms of provision of services. Ridgmont Junction 13 of the M1 is relatively remote from existing major settlements (although	+	+?		

⁴² Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

⁴³ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

		Employment Growth Scenario Options	
SA Objective	Assessment of Effects	Scenario 1:	Scenario 2:
	Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	6,000 New Jobs	3,700 New Jobs
	still within 5km of MK) and while provision of services together with employment is likely, the associated benefits to services in existing settlements are likely to be less clear, although development of employment at this site would complement wider development associated with Aspley Guise and EWR at Ridgmont. The difficulty of assessing the potential effects indicates the need for masterplanning and integration between provision of employment land together with provision of appropriate services and connectivity and accessibility from existing and new housing as demonstrated in the North of Luton and Sundon RFI Framework Plan		
4. Employment To support the economy and ensure that there are suitable opportunities for employment.	Both scenarios will have major employment benefits and a major positive effect on this objective, in terms of overall economic benefits and provision of employment sites, but Scenario 1, in providing for an additional 2,300 jobs, would have the largest potential positive, cumulative and long term benefits. These strategic employment site areas are primarily located at major transport. Both scenarios include a strategic site at the south of Biggleswade and such development could provide opportunities that contribute to the viability and viability of the town centre with the potential for further positive effects.	++	+
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities.	The provision of a range of employment opportunities in a number of locations is likely to be beneficial in terms of improving people's wellbeing. The urban areas of southern Central Bedfordshire experience higher levels of deprivation than the rest of the Plan area, and so development at Sundon (included in Scenario 1) may be expected to have a positive effect in contributing to reducing deprivation through providing a large number of employment opportunities. However, this would also involve development in the Green Belt, although the Framework Plan provides for mitigation for loss of greenfield and Green Belt land and for enhanced green infrastructure provision.	+	+
6. Highways & Air Quality To maintain and	Development of new employment land may generate increased traffic and resulting congestion and emissions at all locations. Scenario 1 through providing for a greater number of jobs would be likely to	0?	0?

SA Objective	Assessment of Effects	Employment Growth Scenario Options	
		Scenario 1:	Scenario 2:
	Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	6,000 New Jobs	3,700 New Jobs
improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions.	generate more traffic and movements. This may be mitigated through implementation of other policies in the Plan particularly T6 Strategic Transport Improvements, T2 Mitigation of Transport Impacts on the Network, T1 Connectivity and Accessibility, T5 Development and Public Transport Interchanges and T6 Low Emission Vehicles. The proximity of the sites to the M1 and A1, and mainline rail stations may provide adequate capacity, particularly if sites are developed in tandem with infrastructure improvements and opportunities for integrated public transport options are developed to reduce increases in car traffic. Thus, while development at this scale is likely to have a negative effect through increased traffic and emissions, there will clearly be opportunities through improvements in public transport, to reduce adverse effects. Therefore, a residual neutral negative effect is predicted but some uncertainty at this stage until further transport modelling is completed.		
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel.	Sundon (Scenario 1) is located adjacent to a railway line in close proximity to the existing railway stations at Harlington and Legrave. Biggleswade and Ridgmont are also in proximity to mainline rail stations and so all Scenarios and sites present opportunities for sustainable transport to be used and enhanced with the potential for enhanced positive effects. Sundon is proximate to Luton, and the North of Luton & Sundon FRI Framework Plan identifies opportunities to enhance sustainable transport. Likewise at Biggleswade development has the potential to extend existing bus services to enhance sustainable transport connections between the site and railway station resulting in potential positive effects. These locations adjacent to major settlements also reduces the need to travel for many potential employees – all with potential for major positive effects that will be cumulative in the longer-term.	++	++

		Employment Growth Scenario Options	
SA Objective	Assessment of Effects	Scenario 1:	Scenario 2:
	Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	6,000 New Jobs	3,700 New Jobs
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ⁴⁴ .	While the increase in employment proposed in both scenarios would be likely to lead to an increase transport and traffic, opportunities to make use and develop sustainable transport would be expected to partially mitigate for this, with associated mitigation of emissions of greenhouse gases. The development of employment floorspace would be expected to comply with national policy and regulations regarding energy efficiency and design standards, and Local Plan policies CCI, CC3, CC5, and HQ6. Development at these scales has the potential for delivery of high standards of energy efficiency and on-site renewable energy.	+	+

⁴⁴ Please note that Flood Risk is considered by the SA within objective number 10

		Employment Growth Scenario Options	
SA Objective	Assessment of Effects	Scenario 1:	Scenario 2:
	Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	6,000 New Jobs	3,700 New Jobs
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality.	Employment growth will lead to increased consumption of water and demand for wastewater treatment. The assessment of each Employment Growth Location (Appendix V) identifies potential issues with regard to water resources availability, water quality and wastewater treatment capacity but concludes that the effects of development in these areas is uncertain, but that there are no strategic limitations on development due to water supply. Policies CCI Climate Change & Sustainability, CC6 Water Quality and CC7 Pollution provide for mitigation to ensure at least neutral effects on water quality, and ensure that development supports Water Resource Management Plans with high water efficiency targets.	0	0
10. Flood Risk To reduce the risk of flooding from all sources.	Development in all of the locations would be likely to avoid Flood Zones 2 and 3 and so with incorporation of sustainable drainage (Policy CC5,) neither Scenario is likely to have an adverse effect on flooding and flood risk.	0	0
11. Soil To protect and conserve soil.	Both scenarios would involve development of greenfield land and so loss of soils, although this is unlikely to be Best and Most Versatile agricultural land. Scenario 1 would involve development of a larger area and so have potential for more negative effect on loss of greenfield land and soils. Some uncertainty until further site specific studies completed.	-?	-?

SA Objective	Assessment of Effects	Employment Growth Scenario Options	
		Scenario 1:	Scenario 2:
	Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	6,000 New Jobs	3,700 New Jobs
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity.	There are a number of SSSIs and County Wildlife Sites proximate to Sundon and so potential for minor negative effects of development at this location primarily through indirect effects of recreation and disturbance, although the North of Luton and Sundon Framework Plan sets out measures to mitigate effects and achieve gains in biodiversity and green infrastructure. There are a number of County Wildlife Sites proximate to Biggleswade and Ridgmont. Development at all locations would need to comply with Plan Policies EE1, EE2, EE3 and EE4 and seek enhancements to biodiversity and green infrastructure, reflecting the opportunity areas and local priorities. It is unlikely that an increased provision of jobs and employment space in the different scenarios would have an increased effect or risk of effect on biodiversity, due to the strong mitigation measures and potential for enhancements to be delivered in tandem with development. Some uncertainty remains at this level of assessment until further studies confirm the possibilities for any biodiversity enhancements	0?	0?
13. Landscape Protect and enhance the landscape and townscape.	Sundon (included in Scenario 1) is in close proximity to the Chilterns AONB. However, the village of Sundon lies between a Growth Location (North of Luton) and the AONB, and the site is adjacent to the M1 and rail line and on the northern edge of Luton, and so an area where there already is significant development reducing the likelihood of a significant effect on the AONB – so some uncertainty remains regarding significance of effects until further project level studies. The other Growth Locations (Scenario 2) are not proximate to areas of protected landscape but could have an urbanising effect on rural landscape character.	-?	0

		Employment Growth Scenario Options	
SA Objective	Assessment of Effects	Scenario 1:	Scenario 2:
	Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	6,000 New Jobs	3,700 New Jobs
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting.	Heritage Assets in the growth locations are limited and so the effects of each Scenario are likely to be limited with neutral effects. There are Archaeological Notification Areas in the Biggleswade and Ridgmont Growth Locations areas and so there may be potential to investigate and record heritage assets of archaeological significance (according with draft Local Plan Policy Archaeology), resulting in increased archaeological knowledge.	0	0

Appendix V: Strategic SA of Growth Location Options – Housing & Employment

Key:

Categories of Significance		
Symbol	Meaning	Sustainability Effect
++	Major Positive	Proposed development encouraged as would resolve existing sustainability problem
+	Minor Positive	No sustainability constraints and proposed development acceptable
0	Neutral	Neutral effect
?	Uncertain	Uncertain or Unknown Effects
-	Minor Negative	Potential sustainability issues: mitigation and/or negotiation possible
--	Major Negative	Problematical and improbable because of known sustainability issues; mitigation likely to be difficult and/or expensive
-	+	SA Objectives 2, 4, 5, 9 & 11 consider more than one sub-topic such that more than one significant effect may be predicted with two symbols. No 2 Communities – first symbol refers to in/out of Green Belt; second symbol refers to community & settlement identities No 4 Employment – first symbol refers to employment support; second symbol refers to vitality/viability of town centres No 5 Health & Equality – first symbol refers to regeneration/deprivation; second symbol refers to Green Infrastructure for health & well-being No 9 Water – first symbol refers to water resources; second symbol relates to water quality No 11 Soil & Land – first symbol refers to greenfield & agricultural land qualities; second symbol relates previously developed land

Growth Location Options tested through SA:

Strategic¹: (large scale growth 500-1500 homes; strategic/new settlement scale growth 1500+ homes)

Non-Strategic: (small scale growth <50 homes; medium scale growth 50-500 homes)

HMA ² Ref Nos	Area A-D	Growth Location Option	Number of Dwellings
N29	B	Arlesey	Up to 2000 homes
N5	C	Aspley Guise	Up to 3000 homes
N17	B	Biggleswade East	Up to 3000 homes
N25 & 26	D	Henlow Airfield & Camp	Up to 1000 homes
L20	A	Luton- North	Up to 4000 homes
L24	A	Luton- West	Up to 2000 homes
N6	C	Marston Vale	New settlement up to 5000 homes
N10	B	Tempsford South and Tempsford Airfield	New settlement up to 7000 homes
N9	C	Wixams South	Up to 1000 homes
N/A	A	Dispersal through Villages	Up to 2000 homes
N/A	B	Dispersal through Villages	Up to 2000 homes
N/A	C	Dispersal through Villages	Up to 2000 homes
N/A	D	Dispersal through Villages	Up to 2000 homes

¹ <http://www.centralbedfordshire.gov.uk/planning/policy/local-plan/shaping-central-beds-consultation.aspx>

² N1-Nx LUC for Central Bedfordshire Council North Growth Options Study & L1-Lx Luton Growth Options Study (November 2016)

Growth Location: Arlesey Number of Dwellings: up to 2000 homes		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The delivery of up to 2000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire with the potential for major long-term positive effects. It is assumed that development at the growth location can meet the policy objectives of draft Local Plan policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.	++
2. Communities³ To maintain and enhance community and settlement identities	Development in this area will not result in the loss of any Green Belt land with neutral effects. Housing growth in this broad location will expand the urban area of Arlesey east and contribute to coalescence between Arlesey and Stotfold. It will also expand the urban area south east and contribute to the coalescence of Arlesey and Fairfield. Extant Policy MA8 Arlesey Cross⁴ comprises two development sites to the east and west of the High Street allocated for a minimum of 1,000 new homes. The adopted Masterplan includes requirements for new employment space, a new school, other amenities, and environmental improvements. Development in this area will integrate well with the existing urban area of Arlesey but is likely to have indirect negative effects on the identity of the smaller settlement of Fairfield in the south east. The A507 provides a degree of separation between Arlesey and Stotfold. The cumulative effects of the additional 2000 homes to the east will need to be considered at the next stage of planning and assessment, particularly regarding identities of the small settlements to the east and south-east. Neutral effects indicated but some uncertainty remains at this stage of assessment.	0 0?

³ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

⁴ <http://www.centralbedfordshire.gov.uk/planning/policy/development-briefs/arlesey.aspx>

Growth Location: Arlesey Number of Dwellings: up to 2000 homes		
3. Services & Facilities To improve accessibility to services and facilities ⁵	Development at the growth location is in close proximity to the currently limited services and facilities available within Arlesey, but including the Arlesey Cross proposals for a new central core to provide a focal point and enhance existing facilities in the town. Given the scale of development at the site it is considered that there is also the potential for significant delivery of provisions to support improved accessibility in this area, building upon the Masterplan proposals with the potential for a major long term positive effect against SA Objective 3. This is supported by draft Local Plan policy (Connectivity and Accessibility).	++
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The growth location has been identified for the development of housing and as such is unlikely to lead to any significant effects against this SA Objective, with the potential for a neutral effect. Arlesey is located on a strategic rail connection route which is likely to increase accessibility to employment areas. Development in this location is also likely to support the vitality and viability of local town centres, including Arlesey and Stotfold, with the potential for minor long term positive effects. Arlesey is also well connected to the A1 for access to larger towns along this corridor.	0 +
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location is not in an area of higher deprivation and thus unlikely to lead to any significant effects. The Environmental Framework ⁶ identifies this area as located within the Ivel River Valley, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects against SA Objective 5.	0 ++
6. Highways & Air Quality To maintain and improve the existing highway	Early transport modelling ⁷ identifies that all new potential growth in this area is likely to have an impact on the A1 and cause further congestion and infrastructure improvements are likely to be required. However, this could be mitigated through good access to public transport networks.	0?

⁵ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

⁶ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

⁷ Aecom (2016) Technical Note Stage 1A Growth Area Analysis

Growth Location: Arlesey Number of Dwellings: up to 2000 homes		
network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Given the scale of development it is anticipated that development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect with an element of uncertainty at this stage. Such further development could enhance the highway proposals in the Arlesey Cross Masterplan with positive synergistic effects. There is no designated AQMA in close distance and therefore, no significant effects on air quality from traffic indicated at this stage.	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The location is well connected to the existing urban area of Arlesey, which is served by bus services. It is anticipated that growth in this location could accommodate a viable extension to such services which operate in Arlesey (e.g. service number 72, 96, 97 and W7⁸) through appropriate development contributions. The existing eastern urban edge of Arlesey is also located around 1.7 miles from Arlesey Railway Station⁹, with the potential for a minor long term positive effect. Arlesey currently has very limited local services and facilities but together with MA8 allocation and this additional 2000 new homes, significant new facilities can be provided therefore reducing the need for residents to travel to other town centres. The Masterplan proposals for Arlesey Cross include a network of pedestrian and cycleways	+
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility). It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	+?

⁸ Google Maps <https://www.google.co.uk/maps>

⁹ Google Maps estimated drive time from the High Street to Arlesey Station

Growth Location: Arlesey Number of Dwellings: up to 2000 homes		
effects of climate change ¹⁰		
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited and tied to a Common End Date (CED) of March 2028. It is also recognised¹¹ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 2000 new homes in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades. With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution,	0

¹⁰ Please note that Flood Risk is considered by the SA within objective number 10

¹¹ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

Growth Location: Arlesey Number of Dwellings: up to 2000 homes		
	strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the location option ¹² , in line with draft Local Plan policy (Flood Risk Management,) it is expected that development would avoid these areas with the potential for a residual neutral effect. Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but uncertain at this stage of appraisal. Likely residual neutral effects.	0
11. Soil To protect and conserve soil	Development in this broad location will predominantly result in the loss of greenfield land with the potential for minor long-term negative effects. To the north and east of Arlesey is Grade 2 agricultural land, and to the south and west the settlement is bordered by Grade 3 (sub-grade 3a or 3 b not known) agricultural land ¹³ . No best and most versatile agricultural land has been identified within the broad location at this stage ¹⁴ , however it is recognised that there remains an element of uncertainty in the agricultural land classification until lower level site assessments have been completed. Given that the location is greenfield land, development is unlikely to contain or require remediation for any contaminated land.	- ?
12. Biodiversity & Geodiversity To protect, enhance and	There are no internationally designated sites in the land surrounding the broad location, nor is the location within the Nature Improvement Area. There are also no National Nature Reserves or SSSIs around the growth location. There is a Local Nature Reserve (LNR) to the east of the growth	+

¹² Environment Agency (2016) Flood Map for Planning

¹³ Central Bedfordshire Council GIS layers (2017)

¹⁴ DEFRA (2016) Magic Map Application

Growth Location: Arlesey Number of Dwellings: up to 2000 homes		
manage biodiversity & geodiversity	location¹⁵, however the town of Stotfold is located between the growth location and the LNR. There are two County Wildlife Sites (CWS) to the west of the growth location, with Lowland Meadow Priority Habitat, Semi-Improved Grassland Priority Habitat and Deciduous Woodland Priority Habitat in the same location¹⁶. However, the town of Arlesey is between the growth location and the CWSs and Priority Habitats. There are 3 small blocks of Deciduous Woodland Priority Habitat to the east/north-east of the growth location, with the closest being just under half a mile away¹⁷. However, these areas of Priority Habitat are located on the other side of the A507. The growth location is not located within the biodiversity network, which instead follows the path of the River Purwell on the other side of Arlesey to the west of the growth location. Overall, due to the lack of designated sites close to the location, and existing development existing between any Priority Habitat and the growth location, no negative effects are likely to occur. Development in this growth location could contribute to the improvement of the biodiversity network. The creation of new habitats and ecological corridors could help connect Priority Habitats to the east of the location with CWS and Priority Habitats to the west of the broad location, creating safe paths for local wildlife. Existing rural pathways in and around the growth location should be maintained and possibly enhanced to allow future residents to have access to open green space, with minor positive benefits for the health of residents. These enhancements would help meet the aims of the Central Bedfordshire Nature Conservation Strategy¹⁸ and the Central Bedfordshire Environmental Framework¹⁹. This could complement and enhance the green and blue infrastructure requirements with the Arlesey Cross Masterplan for synergistic and cumulative positive effects. Overall potential for long-term minor positive effects.	
13. Landscape Protect and enhance the landscape and townscape	This growth location is not within or adjacent to the designated AONB landscape. The broad location is within the East Anglian Chalk National Character Area, and the statements of environmental opportunity identify the need to conserve the groundwater resource and secure sustainable water use (SA Objective 9 identifies the available mitigation) and to create or enhance green infrastructure in relation to the urban fringe and growth areas. There are	+ ?

¹⁵ DEFRA (2016) Magic Map Application

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Central Bedfordshire Council (2015) Central Bedfordshire Nature Conservation Strategy

¹⁹ Central Bedfordshire Council (no date) Environmental Framework

Growth Location: Arlesey Number of Dwellings: up to 2000 homes		
	significant views from Arlesey to Fairfield (and please see SA objective No 2 previously about coalescence). Development in this location has the potential to support the objectives of this landscape area, and minor long term positive effects but uncertain at this stage.	
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	There are 2 Archaeological Notification Areas within the location ²⁰ , in which development (according with draft Local Plan Policy Archaeology) could contribute to investigating and recording heritage assets of archaeological significance. The broad location does not contain any designated heritage assets; however, it is located in close proximity to Listed Buildings in both Arlesey and Fairfield. Given the scale of development at this location it is likely to affect the open countryside setting in between these two areas, and design will be required to respond to differing heritage settings in the south east and west. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects on the settings of the Listed Buildings, with the potential for a residual neutral effect. There remains an element of uncertainty until site level assessments have been completed.	0?

Growth Location: Aspley Guise Number of Dwellings: up to 3000 homes		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and	The delivery of up to 3000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire with the potential for major long-term positive effects.	++

²⁰ Central Bedfordshire Council GIS Map Layers

Growth Location: Aspley Guise Number of Dwellings: up to 3000 homes			
communities are met	It is assumed that development at the growth location can meet the policy objectives of draft Local Plan policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.		
2. Communities²¹ To maintain and enhance community and settlement identities	Housing growth in this broad location will expand the urban area of Aspley Guise north and is unlikely to contribute to coalescence given the existing barrier of the M1 motorway; locating new development to the north should avoid potential coalescence with Milton Keynes to the west. Development in this area will not result in the loss of any Green Belt land with neutral effects. The expansion north of the settlement however is less likely to effectively integrate given the existing railway line providing a barrier for movement and connection with the existing urban form. Development in this area would require significant infrastructure investment to overcome this barrier, although the scale of the potential development could support this. Overall, it is therefore considered to have the potential for a minor long-term negative effect with some uncertainty at this stage of assessment.	0	?
3. Services & Facilities To improve accessibility to services and facilities ²²	Development at the growth location is in close proximity to services and facilities available within Aspley Guise and Milton Keynes. Given the scale of development at the site it is considered that there is also the potential for significant provisions to support improved accessibility in this area, with the potential for a major long term positive effect against SA Objective 3. This is supported by draft Local Plan policy (Connectivity and Accessibility).	++	
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The growth location has been identified for the development of housing and as such is unlikely to lead to any significant effects against this SA Objective, with the potential for a neutral effect. The location is in close proximity to Milton Keynes as a major employment source for Central Bedfordshire and is connected by rail to this area which is likely to increase accessibility to employment areas in this respect. The area is also well connected to J13 on the M1 for employment, and the proposed Ridgmont station for the East-West Link. Development in this location could also support the vitality and viability of local town centres, including Woburn Sands and Milton Keynes, with the potential for minor long term and cross-boundary positive effects.	0	+

²¹ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

²² This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Aspley Guise Number of Dwellings: up to 3000 homes			
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location is not in an area of higher deprivation and thus unlikely to lead to any significant effects.	0	++
	The Environmental Framework ²³ identifies this area as located within Marston Vale, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects against SA Objective 5.		
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Early transport modelling ²⁴ identifies that infrastructure improvements would be crucial given the level of stress on the strategic routes in this area. However, any expected increase in traffic could be mitigated through good access to public transport networks.	0?	
	Given the scale of development is it anticipated that development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect with an element of uncertainty at this stage. There is no designated AQMA in close distance and therefore, no significant effects on air quality from traffic indicated at this stage.		
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The location is separated from the urban area of Aspley Guise by the existing railway line, however the area could connect well with Aspley Guise station and the bus service connections here in the west of the broad location, with the potential for minor long term positive effects. It will also have good access to the proposed EWR station at Ridgmont.	+	
8. Energy & Climate Change To maximise the potential	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility).	+	?

²³ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

²⁴ Aecom (2016) Technical Note Stage 1A Growth Area Analysis

Growth Location: Aspley Guise Number of Dwellings: up to 3000 homes		
for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ²⁵	It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited and tied to a Common End Date (CED) of March 2028. It is also recognised²⁶ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 3000 new homes in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW	0

²⁵ Please note that Flood Risk is considered by the SA within objective number 10

²⁶ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

Growth Location: Aspley Guise Number of Dwellings: up to 3000 homes		
	upgrades With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all sources	The growth location is not in an area at risk of flooding from rivers or the sea²⁷. Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities or Sustainable Drainage Systems, where applicable, with the potential for some positive effects. Likely residual neutral effects.	0
11. Soil To protect and conserve soil	Development in this broad location will predominantly result in the loss of greenfield land with the potential for minor long-term negative effects. There is some Grade 3 (sub-grade 3a or 3b not known) best and most versatile agricultural land in the broad growth location²⁸. Given that the location is greenfield land, development is unlikely to contain or require remediation for any contaminated land.	-?
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	There are no internationally designated biodiversity sites in or around the growth location. A SSSI is located south of the broad location²⁹, however there is existing development between the growth location and the SSSI and a residual neutral effect is therefore likely. There are two small County Wildlife Sites (CWS) to the south of the settlement³⁰. There are also Priority Habitats in the land surrounding the broad growth location, which includes Semi-Improved Grassland, Lowland Meadows, Woodpasture & Parkland and Deciduous Woodland³¹. The broad growth location and the surrounding land is also located in the biodiversity network. Development in this location therefore has the potential to cause fragmentation of existing Priority Habitats, with the potential loss of ecological corridors and disturbance to the biodiversity network which is in the area. However, mitigation is provided through draft Local Plan policy (Nature Conservation) which seeks to ensure that development does not adversely affect designated sites, and draft Local Plan	+

²⁷ Environment Agency (2016) Flood Map for Planning

²⁸ Central Bedfordshire Council GIS layers (2017)

²⁹ DEFRA (2016) Magic Map Application

³⁰ Ibid.

³¹ Ibid.

Growth Location: Aspley Guise Number of Dwellings: up to 3000 homes		
	policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. There are opportunities for enhancement of the biodiversity network in the local area. There are opportunities to create new habitats along the railway line embankments to the south of the broad location, linking in with the biodiversity network. The Greensand Ridge Nature Improvement Area (NIA) is also located a short distance directly to the south of the growth location. Enhancing connections between the two CWs and Priority Habitats with the NIA through new ecological corridors and biodiversity network improvements would result in benefits for both areas. The creation of new habitat sites in and around the broad growth location would also help improve the local biodiversity network. The existing rural footpaths in the broad growth location should also be maintained, as they allow existing residents access to open green space as well as connecting local settlements. The creation of the Bedford & Milton Keynes Waterway, which will pass to the north of Aspley Guise, will provide enhancement to the local biodiversity and GI networks, providing blue and green corridors which will allow wildlife movement, and creating new habitats, with biodiversity gains. These enhancements would help meet the aims of the Central Bedfordshire Nature Conservation Strategy³² and the Central Bedfordshire Environmental Framework³³. Overall there is the potential for long-term minor positive effects	
13. Landscape Protect and enhance the landscape and townscape	This growth location is not located adjacent to or within the designated AONB landscape. The broad location is within the Bedfordshire and Cambridgeshire Claylands National Character Area, and the statements of environmental opportunity identify the potential to create high quality green infrastructure (identified against SA Objective 5) and landscape regeneration in new development and the need to protect the aquifers and quality of the River Great Ouse. Development in this broad location is considered overall to support these objectives with the potential for minor long term positive effects against SA Objective 13.	+

³² Central Bedfordshire Council (2015) Central Bedfordshire Nature Conservation Strategy

³³ Central Bedfordshire Council (no date) Environmental Framework

Growth Location: Aspley Guise		
Number of Dwellings: up to 3000 homes		
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	There are 3 small Archaeological Notification Areas within the location ³⁴ , in which development (according with draft Local Plan Policy Archaeology) could contribute to investigating and recording heritage assets of archaeological significance.	0?
	The broad location is located in close proximity to Listed Buildings in both Aspley Guise and Wavendon, as well as Conservation Areas in Aspley Guise and Husborne Crawley to the south. Given the scale of development at this location it is likely to affect the open countryside setting in between these two areas, and design will be required to respond to differing heritage settings in the south and west. Mitigation is provided through draft Local Plan Policy (Built Heritage) which should ensure development does not lead to any significant effects on the settings of the Listed Buildings and the Conservation Areas with neutral effects but some uncertainty at this stage until lower level assessments have been completed.	

Growth Location: Biggleswade East		
Number of Dwellings: up to 3000 homes		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all	The delivery of up to 3000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire with the potential for major long-term positive effects. It is assumed that development at the growth location can meet the policy objectives of draft Local Plan	++

³⁴ Central Bedfordshire Council GIS Map Layers

Growth Location: Biggleswade East Number of Dwellings: up to 3000 homes			
residents and communities are met	policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.		
2. Communities³⁵ To maintain and enhance community and settlement identities	Housing growth in this broad location will expand the urban area of Biggleswade to the east and decrease the open land between Biggleswade and Dunton. This is however unlikely to significantly contribute towards coalescence of these settlements. There is the potential for coalescence with Sutton to the north-east and mitigation measures (physical separation and significant soft landscaping) would be required. Likely residual neutral effects but some uncertainty remains at this stage of assessment until precise locational details confirm the effectiveness of mitigation possibilities. Development in this area will not result in the loss of any Green Belt land. Development in this area could integrate well with the existing urban area of Biggleswade and support community identity. Overall, it is considered to have the potential for minor long-term cumulative positive effects.	0?	+
3. Services & Facilities To improve accessibility to services and facilities ³⁶	Development at the growth option is in close proximity to services and facilities available within Biggleswade. Given the scale of development at the site it is considered that there is also the potential for significant provisions to support improved accessibility in this area, with the potential for a major long term positive effects. This is supported by draft Local Plan policy (Connectivity and Accessibility).	++	
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The growth location has been identified for the development of housing and as such is unlikely to lead to any significant effects against this SA Objective, with the potential for a neutral effect. However, the option is located on a strategic rail connection route which is likely to increase accessibility to employment areas. Development in this location may also support the vitality and viability of Biggleswade town centre, with the potential for minor long term positive effects.	0	+

³⁵ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

³⁶ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Biggleswade East Number of Dwellings: up to 3000 homes			
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location is not in an area of higher deprivation and thus unlikely to lead to any significant effects.	0	++
	The Environmental Framework ³⁷ identifies this area as located within the Ivel River Valley, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. This will also support the objectives of the Bedfordshire and Cambridgeshire Claylands National Character Area (see SA Objective 13). It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects against SA Objective 5.		
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Early transport modelling ³⁸ identifies that all new potential growth in this area is likely to have negative effects on the A1 and cause further congestion such that infrastructure improvements are likely to be required. This could be mitigated to a degree by good access to public transport networks. However, Improvements to the existing A1 junctions at Biggleswade will be required to mitigate congestion on the A1.	-?	
	Potential strategic scale growth in this location is also likely to have negative effects on the local road network, with particular concerns in relation to routes through Biggleswade towards the A1. It is considered that significant highway improvements will be required to mitigate such effects. Given the scale of development is it anticipated that development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect with an element of uncertainty and minor negative effects at this stage until further transport impact studies and more details for mitigation measures.		

³⁷ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

³⁸ Aecom (2016) Technical Note Stage 1A Growth Area Analysis

Growth Location: Biggleswade East Number of Dwellings: up to 3000 homes		
	There is an AQMA in Sandy ³⁹ . However, the broad area option is located some distance from this such that mitigation measures should be effective with likely neutral effects.	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The location could be well connected to the existing urban area of Biggleswade, which is well-served by bus services. It is anticipated that growth in this location could accommodate a viable extension to such services which operate in the eastern area of Biggleswade (e.g. service number 85, 85A, 188 and W3 ⁴⁰) through appropriate development contributions. The existing eastern urban edge of Biggleswade is also located less than 1.5 miles from Biggleswade Station ⁴¹ , with the potential for a minor long term positive effect. Walking routes and cycleways could be included as part of masterplanning and to enhance the existing network with the potential for synergistic and cumulative positive effects.	+
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ⁴²	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility). It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	+?
9. Water Resources & Quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited	0

³⁹ <https://uk-air.defra.gov.uk/aqma/maps>

⁴⁰ Google Maps

⁴¹ Google Maps estimated drive time from London Road to Biggleswade Station

⁴² Please note that Flood Risk is considered by the SA within objective number 10

Growth Location: Biggleswade East Number of Dwellings: up to 3000 homes		
To minimise the demand for water and maintain or improve water quality	and tied to a Common End Date (CED) of March 2028. It is also recognised⁴³ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 3000 new homes in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all	Though there are areas of flood risk within the location option⁴⁴, in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect.	0

⁴³ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

⁴⁴ Environment Agency (2016) Flood Map for Planning

Growth Location: Biggleswade East Number of Dwellings: up to 3000 homes			
sources	Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but uncertain at this stage of appraisal. Likely residual neutral effects.		
11. Soil To protect and conserve soil	Development in this broad location will result in the loss of greenfield land with the potential for minor long-term negative effects, and is also likely to regenerate areas of previously developed land, particularly in and around Stratton Business Park with the potential for minor long term positive effects – some uncertainty at this stage until further studies are undertaken. There is best and most versatile agricultural land⁴⁵ in the north east of the settlement particularly a large area of Grade 2 east of Stratton Upper School and Community College. Development in this area has the potential for major long term negative effects against SA Objective 11. Given that the broad location contains previously developed land there is the potential for contamination constraints. Draft Local Plan policy (Pollution) should ensure that there will be no significant effects on health, and project level mitigation can ensure the appropriate remediation if necessary with the potential for minor positive effects through land restoration.	-?	+
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	The growth option is not located close to any internationally designated biodiversity sites or located in the Nature Improvement Area. There are no SSSIs within close proximity⁴⁶. Henlow Common and Langford Meadows Local Nature Reserve (LNR) is located to the south-west of the growth location⁴⁷. However, impacts from development are unlikely to affect this site because existing development (Langford) already exists between the growth option and the LNR and there are no ecological corridors between them. The growth location has two County Wildlife Sites (CWS) with some individual areas of Deciduous Woodland Priority Habitat. The northern half of the growth location contains existing biodiversity network, however the south of the growth location and the immediate surrounding land does not have any biodiversity network, but there are additional blocks of Deciduous Woodland Priority Habitat. Mitigation is provided through draft Local Plan policy (Nature Conservation) which seeks to ensure that development does not adversely affect designated sites and draft Local	+	

⁴⁵ DEFRA (2016) Magic Map Application

⁴⁶ DEFRA (2016) Magic Map Application

⁴⁷ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

Growth Location: Biggleswade East Number of Dwellings: up to 3000 homes		
	Plan policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. Development in this growth location has the potential to provide enhancement to the biodiversity network. Currently there is a lack of biodiversity network in the land around the south of the growth location. However, development could help connect the biodiversity network in the north of the growth location with the biodiversity network to the west of Biggleswade, forming a band of biodiversity network running along the southern border of the settlement. This network could connect the existing blocks of Priority Habitats and provide an ecological corridor to allow safe wildlife movement. These enhancements would help meet the aims of the Central Bedfordshire Nature Conservation Strategy⁴⁸ and the Central Bedfordshire Environmental Framework⁴⁹. It is important that the existing CWSs and Priority Habitat blocks are protected, possibly with the use of buffer zones around valuable areas, and future residents should have access to the CWSs with benefits for the health of future residents. There is the potential for long term minor positive effects through the enhancement of and creation of new biodiversity network.	
13. Landscape Protect and enhance the landscape and townscape	This growth location is not located adjacent to or within the designated AONB landscape.	+
	The growth location is within the Bedfordshire and Cambridgeshire Claylands National Character Area, and the statements of environmental opportunity identify the potential to create high quality green infrastructure (identified against SA Objective 5) and landscape regeneration in new development and the need to protect the aquifers and quality of the River Great Ouse (SA Objective 9 outlines the available mitigation for such effects). Development in this broad location is considered overall to support these objectives with the potential for minor long term positive effects against SA Objective 13.	
14. Historic Environment To ensure the	There are a number of Archaeological Notification Areas within the location⁵⁰, in which development (according with draft Local Plan Policy Archaeology) could contribute to investigating and recording heritage assets of archaeological significance.	0?

⁴⁸ Central Bedfordshire Council (2015) Central Bedfordshire Nature Conservation Strategy

⁴⁹ Central Bedfordshire Council (no date) Environmental Framework

⁵⁰ Central Bedfordshire Council GIS Map Layers

Growth Location: Biggleswade East Number of Dwellings: up to 3000 homes		
protection and enhancement of heritage assets, the historic environment and its setting	The growth location includes a designated Scheduled Monument; Stratton Park moated enclosure and associated manorial earthworks. Records⁵¹ indicate that the moat is identified with the original medieval manor of Stratton, but was replaced as the main residence when the lord of the manor moved to nearby Stratton Park House in the 16th century. Adjacent to the east side of the moat are the well-defined earthwork remains of a complex network of hollow-ways fields and platforms interpreted as the sites of contemporary manorial out-works comprising of horticultural plots and out-house buildings associated with the moated site. The site is also considered to be within the wider setting of Stratton Park Moat (Scheduled Monument), John O'Gaunts Hill (Scheduled Monument) and listed buildings as well as the Conservation Area of Sutton. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects on the setting of Designated Heritage Assets, with the potential for a residual neutral effect. There remains an element of uncertainty until site level assessments have been completed.	

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes
[Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]

⁵¹ <https://historicengland.org.uk/listing/the-list/list-entry/1012161>

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes [Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The delivery of up to 1000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire with the potential for major long-term positive effects. It is assumed that development at the growth location can meet the policy objectives of draft Local Plan policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.	++
2. Communities⁵² To maintain and enhance community and settlement identities	Housing growth in this broad location will develop the land between Henlow and Henlow Camp. While it is assumed that these two areas share connected identities to some extent, given the scale of development in comparison to the small scale of the existing settlements, this is likely to significantly affect community identities in these areas with the potential for a minor long-term cumulative negative effect against SA Objective 2. Development in this area will not result in the loss of any Green Belt land with neutral effects.	0 -
3. Services & Facilities To improve accessibility to services and facilities ⁵³	Development at the growth location is in close proximity to services and facilities available within Lower Stondon, Henlow and Henlow Camp. Given the scale of development at the site it is considered that there is also the potential for significant provisions to support improved accessibility in this area, with the potential for a major long term positive effect against SA Objective 3. This is supported by draft Local Plan policy (Connectivity and Accessibility).	++

⁵² Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

⁵³ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes [Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]			
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The growth location has been identified for the development of housing and as such is unlikely to lead to any significant effects against this SA Objective, with the potential for a neutral effect. The option is located in close proximity to a strategic rail connection route at Arlesey which is likely to increase accessibility to employment areas. Development at this location is also likely to support the vitality and viability of local town centres, including Arlesey, Shefford and Stotfold, with the potential for minor long term positive effects.	0	+
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location is not in an area of higher deprivation and thus unlikely to lead to any significant effects. The broad locational area includes previously developed land including a golf course that had waste imported for site bunding. It is understood that there have been historically stored hazardous substances (medical and aircraft fuel) and there is also a source of contamination from a disused railway line. MBDA Systems (including manufacture and storage of missiles) are located to the north and care will be required to ensure the health and well-being for any proposed residential areas. Development Management Policies such as Policy CC7 Pollution and HQ1 Health Impact Assessment provide mitigation measures regarding the protection of human health indicating neutral effects but some uncertainty at this stage of assessment until more detailed masterplanning and project level studies. Previously developed and contaminated land are dealt with SA Objective No 11 Soils & Land and it is acknowledged that remediation would be required to safe guard the health of future occupiers. The Environmental Framework⁵⁴ identifies that this area is not located within a priority corridor of the strategic green infrastructure network. However, it is considered that development in this area has the potential to support green infrastructure and habitat connectivity with the potential for minor long-term positive effects against SA Objective 5.	0?	+

⁵⁴ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes [Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]		
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Early transport modelling⁵⁵ identifies that further growth in this area may put additional pressure on the local roads, particularly the A507 and routes towards Hitchin, as well as the strategic routes such as the A507 and A1. However, this could be mitigated through good access to public transport networks. Given the scale of development is it anticipated that development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect with an element of uncertainty at this stage. There is no designated AQMA in close distance and therefore, no significant effects on air quality from traffic indicated at this stage.	0?
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The location is connected to the existing urban areas of Henlow, Henlow Camp and Lower Stondon which is served by bus services. It is anticipated that growth in this location could accommodate viable extensions to such services (e.g. service number 71, 188, 190, W1, W4 and W7⁵⁶) through appropriate development contributions. The existing northern edge of the broad location is located around 1.5 miles from Arlesey Station⁵⁷, with the potential for a minor long term positive effect.	+
8. Energy & Climate Change To maximise the potential	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility).	+?

⁵⁵ Aecom (2016) Technical Note Stage 1A Growth Area Analysis

⁵⁶ Google Maps

⁵⁷ Google Maps estimated drive time from the A507 to Arlesey Station

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes [Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]		
for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ⁵⁸	It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited and tied to a Common End Date (CED) of March 2028. It is also recognised⁵⁹ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 1000 new homes in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification	0

⁵⁸ Please note that Flood Risk is considered by the SA within objective number 10

⁵⁹ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes [Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]			
	and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.		
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the location option⁶⁰, in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect. Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but uncertain at this stage of appraisal. Likely residual neutral effects.	0	
11. Soil To protect and conserve soil	Development in this broad location will result in the loss of greenfield land and is also likely to regenerate areas of previously developed land, with the potential for both negative and positive effects against SA Objective 11. There is Grade 2 best and most versatile agricultural land in the broad growth location, specifically to the east, south and west of Henlow Camp. To the north there is Grade 3 agricultural land (sub-grade 3a or 3b not known)⁶¹.	-	+ ?

⁶⁰ Environment Agency (2016) Flood Map for Planning

⁶¹ Central Bedfordshire Council GIS layers (2017)

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes [Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]		
	Given the nature of the land use at RAF Henlow there may be contamination constraints and as described above under SA Objective No 5 on health, contaminated land through previous uses is likely with the potential for negative effects. Draft Local Plan policy (Pollution) should ensure that there will be no significant effects on health, and project level mitigation can ensure the appropriate remediation if necessary with the potential for minor positive effects through land restoration and helping resolve an existing sustainability problem – some uncertainty remains at this stage until further studies and details of mitigation possibilities prepared.	
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity.	There are no internationally designated biodiversity sites in or immediately around the proposed growth location. There are also no SSSIs, National Nature Reserves or Local Nature Reserves around the growth location. To the east of the growth location there are a number of County Wildlife Sites (CWS) and a range of Priority Habitats⁶². The Priority Habitats include Deciduous Woodland, Floodplain Grazing Marsh, Lowland Meadows and semi-improved Grassland. The biodiversity network is also located to the east of the growth location, encompassing the Priority Habitat and CWSs, whilst following the path of the River Purwell. Development in this growth location therefore has the potential to result in negative effects such as light and noise pollution affecting local wildlife, increased recreation use resulting in disturbance and destruction, and possible effects on the River Purwell through run-off and waste. A buffer zone around this area would help protect the CWSs and Priority Habitat. Mitigation is provided through draft Local Plan policy (Nature Conservation) which seeks to ensure that development does not adversely affect CWSs, and draft Local Plan policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. There is the potential for improvement and enhancement of the biodiversity network. The growth location is in an area which has a limited amount of biodiversity network, and so the creation of new ecological corridors and new habitats would help increase the ecological value of the area.	+

⁶² DEFRA (2016) Magic Map Application

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes [Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]		
	These enhancements would help meet the aims of the Central Bedfordshire Nature Conservation Strategy ⁶³ and the Central Bedfordshire Environmental Framework ⁶⁴ . Any footpaths in the growth location should be maintained to allow current and future residents access to greenspace and the CWSs. Overall it is considered that there is the potential for long-term minor positive effects.	
13. Landscape Protect and enhance the landscape and townscape	This growth location is not located adjacent to or within the designated AONB landscape. The broad location is within the Bedfordshire and Cambridgeshire Claylands National Character Area, and the statements of environmental opportunity identify the potential to create high quality green infrastructure (identified against SA Objective 5) and landscape regeneration in new development and the need to protect the aquifers and quality of the River Great Ouse. Development in this location is considered overall to support these objectives with the potential for minor long term positive effects against SA Objective 13.	+
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting.	There are a small number of Archaeological Notification Areas within the location ⁶⁵ , in which development (according with draft Local Plan Policy Archaeology) could contribute to investigating and recording heritage assets of archaeological significance.	?
	The broad location contains Listed Buildings (190 Hitchin Road, and aircraft hangars and the coupled general service shed at RAF Henlow). The development of housing is likely to affect the heritage setting and use of these buildings, and it is recognised that there is the potential for both positive and negative effects. Development will require high quality, responsive design. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects on the settings of the Listed Buildings, however the effects of development in this area remain uncertain until site level proposals and	

⁶³ Central Bedfordshire Council (2015) Central Bedfordshire Nature Conservation Strategy

⁶⁴ Central Bedfordshire Council (no date) Environmental Framework

⁶⁵ Central Bedfordshire Council GIS Map Layers

Growth Location: Henlow Airfield & Camp Number of Dwellings: up to 1000 homes [Please note that the SA was undertaken at an earlier stage of developing this proposed Growth Location & only considered new housing; subsequently the Council has decided to propose this location for strategic employment]		
	details can be assessed.	

Growth Location Option: Luton North Number of Dwellings: up to 4000 homes		
SA Topic & Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The delivery of up to 4000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire as well as the needs of Luton with the potential for major long-term positive effects. It is assumed that development at the growth location can meet the policy objectives of draft Local Plan policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.	++
2. Communities⁶⁶ To maintain and enhance community and settlement identities	Housing growth in this broad location will expand the urban area of Luton north and contribute to coalescence between Luton and lower Sundon. It will also expand the urban area east towards Houghton Regis with the potential for cumulative effects to the north. The contribution to coalescence of the settlements is considered to have the potential for minor long term negative effects. Development in this area will also result in the loss of Green Belt land. The Green Belt Study⁶⁷ identifies that this land as parcel L2, all of which is considered to make a strategic contribution to the purposes of the Green Belt. As such, development in this area is considered to have the potential for major long-term negative effects. Development in this area could integrate well with the existing urban area of Luton but is likely to have indirect negative effects on the identity of the smaller surrounding settlements such as Sundon. Overall, it is considered to have the potential for minor long-term cumulative negative effects on communities in Central Bedfordshire.	-- -

⁶⁶ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

⁶⁷ LUC for Central Bedfordshire Council Green Belt Study (October, 2016)

3.Services & Facilities To improve accessibility to services and facilities ⁶⁸	Development at the growth location option is in close proximity to services and facilities available within Luton. Given the scale of development at the site it is considered that there is also the potential for significant provisions to support improved accessibility in this area, with the potential for a major long term positive effect against SA Objective 3. This is supported by draft Local Plan draft policy (Connectivity and Accessibility).	++
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The growth option has been identified for the development of housing and as such is unlikely to lead to any significant effects against this SA Objective, with the potential for a neutral effect. The location is in close proximity to Luton as a major employment source for Central Bedfordshire & thus it is likely to increase accessibility to employment areas in this respect. Development in this location may also support the vitality and viability of the major town centres in close proximity, Dunstable and Luton, with the potential for minor long term and cross-boundary positive effects. As a large urban extension, employment would be proposed and the site is located adjacent to the potential Sundon RFI – potential for positive effects also for residents living in north Luton.	0 +
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location option is not in an area of higher deprivation and therefore, no significant effects. The Environmental Framework⁶⁹ identifies this area as located within The Chalk Arc, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. Of importance is The Chalk Arc Project⁷⁰ that focuses on securing green space in and around proposed housing growth. The growth location is identified in the Chalk Arc Project as Area D – North Luton and Chilterns priority zone. The aim here is to improve public perception of safety at the northern end of Great Bramingham Park and increase the site's biodiversity by improving an area of chalk grassland. Development in this area could also contribute to improving the visual impact of the Friends of Gill Blowers Community Orchard and wildflower meadow. It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects. This is further considered to indirectly positively affect the landscape objectives of the National Character Area 110: Chilterns (see SA Objective 13).	0 ++

⁶⁸ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

⁶⁹ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

⁷⁰ <http://www.bedscape.org.uk/BRMC/chalkarc/home.htm>

6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Early transport modelling⁷¹ identifies that development adjacent to Luton is likely to increase congestion for routes into Luton and other urban roads as well as links to the strategic highway network; however, this could be mitigated through good access to public transport networks including the Midland Main railway line. The proposed M1-A6 Link Road will provide significant mitigation for increased congestion with the potential for residual neutral effects – but some uncertainty remains at this stage of assessment. Recent additional funding⁷² indicates more certainty for this major highway improvement that will complement other proposed schemes and benefit the wider sub-regional area with positive effects in the longer-term that could be synergistic and cumulative. Given the scale of development is it anticipated that development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan Policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect but with an element of uncertainty at this stage. There are 3 AQMAs in Luton⁷³ and one in nearby Dunstable. However, the broad area option is located some distance from these AQMAs such that mitigation measures should be effective with likely neutral effects.	0?
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The location is well connected to the existing urban area of Luton, which is well-served by bus services. It is anticipated that growth in this location could accommodate a viable extension to such services which operate in the northern area of Luton (e.g. service number 20, 23, 823 and services supporting the Marsh Farm area⁷⁴) through appropriate development contributions. The existing northern urban edge of Luton is located less than 2 miles from Leagrave Station, and bus service number 20 and 27 offers sustainable transport connections to this station⁷⁵. Overall it is considered that there is the potential for minor long term positive effects.	+
8. Energy & Climate Change To maximise the	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility).	+?

⁷¹ Aecom (2016) for Central Bedfordshire Council. Technical Note Stage 1A Growth Area Analysis

⁷² <http://www.centralbedfordshire.gov.uk/news/march/gov-funding-link-road.aspx>

⁷³ <https://uk-air.defra.gov.uk/aqma/maps>

⁷⁴ Google Maps

⁷⁵ Google Maps estimated drive time and route connections from Pinewood Close (most northern tip of existing Luton urban area) to Leagrave Station

potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ⁷⁶	It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study⁷⁷ identifies that this locational option lies within the Upper Lea catchment, located on unconfined chalk geology, in which there are a large number of abstraction licences for groundwater resources, utilised for supporting the public water supply and agricultural uses. There is no surface water available for licensing across this catchment at any flow level as the recent flows are below the requirement to meet a Good Ecological Status. It is identified that no new consumptive licenses for groundwater will be granted in the catchment, and the water resources (for both surface and groundwater abstraction) are available less than 30% of the time, indicating pressures on the catchment for resources. It is also recognised⁷⁸ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 4000 new homes in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. The River Lee through Luton has been classified as poor quality with regard to the EU Water Framework Directive, but this is not near to the growth locational option to the north of Luton. The option is not within zones 1-2 of any source protection zones and with draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality. Other draft Policies such as on Sustainable Drainage offer possibilities for enhancement through resolving existing problems but uncertain at this stage until more detailed studies.	0

⁷⁶ Please note that Flood Risk is considered by the SA within objective number 10

⁷⁷ JBA for Central Bedfordshire Council (Jan 2017) Water Cycle Study Stage 1

⁷⁸ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

10. Flood Risk To reduce the risk of flooding from all sources	The broad growth location option is not in an area at risk of flooding from rivers or the sea ⁷⁹ . Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, with the potential for some positive effects. Likely residual neutral effects.	0
11. Soil To protect and conserve soil	Development in this broad location option will predominantly result in the loss of greenfield land with the potential for minor long-term negative effects. There is Grade 2 best and most versatile agricultural land in the broad growth location, and some grade 3 agricultural land (sub-grade 3a or 3b not known)⁸⁰. It is recognised that there remains an element of uncertainty in the agricultural land classification until lower level site assessments have been completed. Given that the location is greenfield land, development is unlikely to contain or require remediation for any contaminated land.	-?
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	The option is not located near any internationally designated sites nor located in the Nature Improvement Area, but is located close to nationally designated biodiversity sites. Directly to the north-west of the growth option is Sundon Chalk Quarry SSSI and County Wildlife Site (CWS)⁸¹, containing a range of habitats which have enabled a rich and varied insect fauna to develop, making this one of the most important invertebrate sites in the county⁸². These habitats include two Priority Habitats; Lowland Calcareous Grassland and Deciduous Woodland⁸³. Just over half a mile to the east of the growth location is Galley and Warden Hills SSSI (also a designated CWS and Local Nature Reserve (LNR)) that supports characteristic down land flora, including many locally uncommon species and nationally rare plants, as well as Lowland Calcareous Grassland Priority Habitat⁸⁴. Just under a mile to the north-west of the growth location is Fancott Woods & Meadows SSSI which contains Lowland Meadows Priority Habitat⁸⁵. Development therefore has the potential to affect nationally designated biodiversity, particularly in the north-west, through increased noise and light pollution and disturbance. Mitigation is provided through draft Local Plan policy (Nature Conservation) which ensures that development will not adversely affect nationally designated biodiversity. Potential for a residual neutral effect.	+

⁷⁹ Environment Agency (2016) Flood Map for Planning

⁸⁰ Central Bedfordshire Council GIS layers (2017)

⁸¹ Ibid.

⁸² Sundon Chalk Quarry Citation (1998) [Accessed Online: 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1005586.pdf

⁸³ DEFRA (2016) Magic Map Application

⁸⁴ Galley & Warden Hills Citation (1998) [Accessed Online: 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1000571.pdf

⁸⁵ DEFRA (2016) Magic Map Application

	In addition, there are three locally designated County Wildlife Sites within the growth location option which contain Deciduous Woodland Priority Habitats⁸⁶; these habitats also extend beyond the designated sites. The growth option also contains areas located within the existing biodiversity network. Development has the potential to lead to fragmentation of these ecological corridors, and thus potential for minor long-term negative effects. Development also has the potential to support increased connectivity through new habitat creation or contributions to existing habitat improvements, and thus potential for minor long-term positive effects. Draft Local Plan policy (Nature Conservation) seeks to ensure that development does not adversely affect CWSs, and draft policy (Enhancing Ecological Networks) seeks to ensure that development positively contributes to biodiversity. Overall it is considered likely, therefore, that development will lead to minor long-term positive effects in consideration of the mitigation measures provided through strong draft policies. Possible enhancements that could be applied to improve the local biodiversity network in this area include the provision of ecological corridors or stepping stones such as hedges or woodland to enhance connections between existing sites and areas of Priority Habitat, and ensure safe pathways for wildlife. There would also be the opportunity to encourage future residents of any development to engage with local biodiversity in a sustainable way by providing appropriate access. These enhancements would help meet the aims of the Central Bedfordshire Nature Conservation Strategy⁸⁷ and the Central Bedfordshire Environmental Framework⁸⁸.	
13. Landscape Protect and enhance the landscape and townscape	This growth location option is adjacent to or partially within (precise boundary unclear at this stage) the designated AONB landscape. Development at this scale has significant potential to negatively affect the AONB setting through urbanisation in a previously undeveloped area. It is considered therefore that there is the potential for major long-term negative effects against SA Objective 13. Mitigation measures could include development avoiding the AONB and screening with creative design that could reduce negative effects on the setting of the AONB – however, this is uncertain until further studies are undertaken and the precise likely location of new development is known. The option is within the Chilterns National Character Area, and the statements of environmental opportunity identify the need to conserve the Chilterns' groundwater resource and secure sustainable water use (discussed further in SA Objective 9) and to create or enhance green infrastructure in relation to the urban fringe and growth areas such as Luton (discussed in SA Objective 5) to support the objectives of this landscape area.	--?

⁸⁶ Ibid.

⁸⁷ Central Bedfordshire Council (2015) Central Bedfordshire Nature Conservation Strategy

⁸⁸ Central Bedfordshire Council (no date) Environmental Framework

14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	There are a number of Archaeological Notification Areas within the location⁸⁹, in which development (according with draft Local Plan Policy Archaeology) could contribute to investigating and recording heritage assets of archaeological significance. There are no designated heritage assets within the location option. Just adjacent to the eastern edge of the growth location is Dray's Ditches Scheduled Monument, earthworks that date back to Bronze and Iron Age times and which are related to the ancient route of Icknield Way⁹⁰. In 2012 this Scheduled Monument was identified on the Heritage at Risk Register, noted to be in 'generally satisfactory' condition 'but with significant localised problems, including dumping'⁹¹. Now in 2016 it is not identified in the at Risk Register and as such it is assumed that these issues have been reviewed and addressed. Increased development in the area should ensure that it supports any measures in place to avoid the resurgence of such localised problems. Adjacent to the growth location in the north, Lower Sundon contains the Listed Buildings of the Church of St Mary, St Mary's Vicarage, Chestnut Cottage and Aubers Farmhouse. Development may require mitigation measures to avoid negative effects on the settings of these Listed Buildings. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects. Overall, likely neutral effects with an element of uncertainty at this stage until lower level assessments have been completed.	0?
--	--	-----------

⁸⁹ Central Bedfordshire Council GIS Map Layers

⁹⁰ Luton Borough Council (2016) Luton's Heritage: https://www.luton.gov.uk/Leisure_and_culture/Events,%20tourism%20and%20accommodation/Pages/Luton's%20heritage.aspx

⁹¹ <http://www.luton-dunstable.co.uk/sites-listed-in-at-risk-report-heritage-body/story-21699316-detail/story.html>

Growth Location: Luton West Number of Dwellings: up to 2000 homes		
SA Topic & Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The delivery of up to 2000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire as well as some of the needs of Luton with the potential for major long-term positive effects. It is assumed that development at the growth location can meet the policy objectives of draft Local Plan policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.	++
2. Communities⁹² To maintain and enhance community and settlement identities	Housing growth in this broad locational option will expand the urban area of Luton to the west and contribute to the coalescence of Luton with the north of Caddington with the potential for a minor long term negative effect. Development in this area is also likely to consume the small village of Chaul End, and erode the small settlement identity, with the potential for major long term negative effects. Development in this area will result in the loss of Green Belt land. The Green Belt Study⁹³ identifies this land as parcel L6, within which the small fields adjacent to the village of Caddington may make a relatively weak contribution to Green Belt purposes. The proposed development of up to 2000 new homes is likely to extend beyond these small fields, with the potential for major negative effects through loss of Green Belt. However, development in this area is unlikely to integrate well with the existing urban area of Luton due to the separation provided by the M1 -there may be opportunity to enhance the identity of communities in Luton – uncertainty at this stage and any new development is likely to function as a self-contained settlement. Overall, there are likely minor negative effects with uncertainty as to the effectiveness of mitigation measures until further studies are completed.	-- -?

⁹² Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

⁹³ LUC for Central Bedfordshire Council Green Belt Study (October, 2016)

Growth Location: Luton West Number of Dwellings: up to 2000 homes		
3. Services & Facilities To improve accessibility to services and facilities ⁹⁴	Development at the growth location option is in close proximity to services and facilities available within Luton and Dunstable. Given the scale of development proposed, it is considered that there is also the potential for significant provisions to support improved accessibility in this area, with the potential for a major long term positive effects. This is supported by draft Local Plan policy (Connectivity and Accessibility).	++
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The growth location option has been identified for the development of housing and as such is unlikely to lead to any significant effects against this SA Objective, with the potential for a neutral effect. The option's close proximity to Luton as a major employment source for Central Bedfordshire is likely to increase accessibility to employment areas in this respect. Housing development in this area may also support the vitality and viability of the major town centres in close proximity, namely Dunstable and Luton, with the potential for minor long term and cross-boundary positive effects.	0 +
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The option is in close proximity to areas of higher deprivation (Dunstable Manshead and Caddington). Development therefore has the potential to improve accessibility, promote investment & reduce inequalities with the potential for major long-term and cumulative positive effects. There is the potential for noise pollution from the M1 and London Luton Airport with the potential to cause significant health implications for future occupiers if development is not suitably located, designed and impacts mitigated. Development Management Policies CC7 Pollution and HQ1 Health Impact Assessment should provide sufficient mitigation measures but some uncertainty remains at this stage of assessment until further studies and masterplanning developed. The Environmental Framework⁹⁵ identifies this area as located within The Chalk Arc, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. Of importance is The Chalk Arc Project⁹⁶ which focuses on securing green space in and around proposed housing growth. The growth location is identified in the Chalk Arc Project as Area C – South Dunstable and South Luton Priority Zone. Development in this area could contribute to existing projects including enhanced access and interpretation, as well as community involvement at Blows Down, increased public use of the green space at Downside, and improvements to the quality of one of the accesses to Blow's Downs Park. It is considered therefore that development in this area has the potential to support	++? ++

⁹⁴ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

⁹⁵ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

⁹⁶ <http://www.bedscape.org.uk/BRMC/chalkarc/home.htm>

Growth Location: Luton West Number of Dwellings: up to 2000 homes		
	green infrastructure priorities and have major long-term positive effects. This is further considered to indirectly positively affect the landscape objectives of the National Character Area 110: Chilterns (see SA Objective 13).	
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Early transport modelling ⁹⁷ identifies that development adjacent to Luton is likely to increase congestion for routes into Luton and other urban roads as well as links to the strategic highway network; Chaul End Road is a country lane that would need significant upgrades. Luton Road, will require junction improvements. This could also be mitigated to some extent through enhanced access to public transport networks including the Midland Main railway line.	-?
	Given the scale of development is it anticipated that new development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect but some uncertainty remaining at this stage. There are 3 AQMAs in Luton ⁹⁸ and one in nearby Dunstable. However, the broad area option is located some distance from these AQMAs such that mitigation measures should be effective with likely neutral effects.	
7. Sustainable Transport To encourage a	Although the locational option is adjacent to the urban area of Luton, it is disconnected by the M1 motorway which creates a significant barrier to integration, with likely significant infrastructure investment requirements to create the appropriate connections to existing modes of sustainable	+

⁹⁷ Aecom (2016) Technical Note Stage 1A Growth Area Analysis

⁹⁸ <https://uk-air.defra.gov.uk/aqma/maps>

Growth Location: Luton West Number of Dwellings: up to 2000 homes		
demonstrable modal shift and reduce the need to travel	transport, including bus services along Dallow Road (801, X31) and Castle Croft Road (28, 28A, 29, 29A, 828 & 829⁹⁹); however, there is the Busway¹⁰⁰ that links H Regis, Dunstable & Luton, and the closest train station at Luton (approx. 2.5miles¹⁰¹). However, given the scale of development for this option and that it is more likely to be a self-contained development, it is anticipated that these infrastructure provisions can be provided, and supported by emerging draft Local Plan Policies, with the potential for minor long term positive effects.	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ¹⁰²	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility).	+
	It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study¹⁰³ identifies that this locational option lies within the Upper Lea catchment, located on unconfined chalk geology, in which there are a large number of abstraction licences for groundwater resources, utilised for supporting the public water supply and agricultural uses. There is no surface water available for licensing across this catchment at any flow level as the recent flows are below the requirement to meet a Good Ecological Status. It is identified that no new consumptive licenses for groundwater will be granted in the catchment, and the water resources (for both surface and groundwater abstraction) are available less than 30% of the time, indicating pressures on the catchment for resources.	0

⁹⁹ Google Maps

¹⁰⁰ <http://www.busway.net/>

¹⁰¹ Google Maps estimated drive time from Hatters Way (existing road in the north of the growth location) to Luton Station

¹⁰² Please note that Flood Risk is considered by the SA within objective number 10

¹⁰³ JBA for Central Bedfordshire Council (Jan 2017) Water Cycle Study Stage 1

Growth Location: Luton West Number of Dwellings: up to 2000 homes		
	It is also recognised¹⁰⁴ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Lee Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2020. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 2000 new homes in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all sources	The growth option is not in an area at risk of flooding from rivers or the sea¹⁰⁵. Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems where applicable and there may be possibilities for enhanced effects to help resolve existing flooding problems but uncertain at this stage of appraisal. Overall, a residual neutral effect at this stage.	0

¹⁰⁴ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

¹⁰⁵ Environment Agency (2016) Flood Map for Planning

Growth Location: Luton West		
Number of Dwellings: up to 2000 homes		
11. Soil To protect and conserve soil	Development in this option will predominantly result in the loss of greenfield land (with the exception of a large vehicle compound area, if this is included) with the potential for minor long-term negative effects.	-?
	The broad growth location contains Grade 3 best and most versatile agricultural land (sub-grade 3a or 3b not known) ¹⁰⁶ . It is recognised that there remains an element of uncertainty in the agricultural land classification until lower level site assessments have been completed. Given that the location is greenfield land, development is unlikely to contain or require remediation for any contaminated land.	
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	The option is not located near any internationally designated sites nor located in the Nature Improvement Area. It is located close to a nationally designated biodiversity site, Blow's Down SSSI (also a County Wildlife Site (CWS)), located around a mile to the west of the growth location¹⁰⁷. The SSSI is a rich and varied site with a large area of open, unimproved grassland¹⁰⁸, and contains Lowland Calcareous Grassland Priority Habitat. The SSSI may be negatively affected by potential development due to an increase in recreational use and potential increase in noise and light pollution. However, it should be noted that the SSSI is already heavily bordered by urban development in Houghton Regis. Mitigation is provided through draft Local Plan policy (Nature Conservation) with the potential for an overall long-term residual neutral effect. It is understood that there are areas of ancient woodland within the broad locational area and these would need to be avoided by any new development. Just over a mile to the west of the growth location is a Local Nature Reserve (LNR)¹⁰⁹ which contains Lowland Calcareous Grassland Priority Habitat and Deciduous Woodland Priority Habitat¹¹⁰. There are also a small number of CWSs around the growth option, including one directly to the north, one directly to the south and another site around half a mile to the west. The proposed option contains Lowland Calcareous Grassland Priority Habitat and Deciduous Woodland Priority Habitat¹¹¹. The area, together with land to the north-west and west is also within the biodiversity network¹¹². Due to the presence of a number of different Priority Habitats as well as a LNR and CWSs, there is the possibility of negative effects, including habitat fragmentation and species disturbance. However, mitigation is provided	+?

¹⁰⁶ Central Bedfordshire Council GIS layers (2017)

¹⁰⁷ DEFRA (2016) Magic Map Application

¹⁰⁸ Blow's Down SSSI Citation (1998) [Accessed Online: 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1005495.pdf

¹⁰⁹ DEFRA (2016) Magic Map Application

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² The Wildlife Trust for Central Bedfordshire Council (2015) A Nature Conservation Strategy for Central Bedfordshire

Growth Location: Luton West Number of Dwellings: up to 2000 homes		
	through draft Local Plan policy (Nature Conservation) which seeks to ensure that development does not adversely affect biodiversity sites, and draft Local Plan policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. Enhancement could be achieved through increasing the connectivity of areas of Priority Habitats with the SSSI, LNR and CWSs in the surrounding area via new ecological corridors. Existing rural footpaths could also be developed to allow future residents better access to the area's natural environment, with positive benefits for health and green space access (see also SA Objective No 5). These enhancements would help meet the aims of the Central Bedfordshire Nature Conservation Strategy¹¹³ and the Central Bedfordshire Environmental Framework¹¹⁴. Overall it is considered that there is the potential for long-term minor positive effects for improving local biodiversity but some uncertainty at this stage as depends upon more detailed studies.	
13. Landscape Protect and enhance the landscape and townscape	This growth location is adjacent to / partially within (precise boundary unclear at this stage) the designated AONB landscape. Development at this scale has significant potential to negatively affect the AONB setting through urbanisation in a previously undeveloped area. It is considered therefore that there is the potential for major long-term negative effects against SA Objective 13.	--
	The broad location is within the Chilterns National Character Area, and the statements of environmental opportunity identify the need to conserve the Chilterns' groundwater resource and secure sustainable water use (discussed further in SA Objective 9) and to create or enhance green infrastructure in relation to the urban fringe and growth areas such as Luton (discussed in SA Objective 5) to support the objectives of this landscape area.	
14. Historic Environment To ensure the	There are two Listed Buildings (Chaul End Farmhouse in the north and Church of All Saints in Caddington in the south) that may be affected by development within this growth option, which is also in close proximity to Caddington Conservation Area. Development may require mitigation measures to avoid	0?

¹¹³ ibid

¹¹⁴ Central Bedfordshire Council (no date) Environmental Framework

Growth Location: Luton West Number of Dwellings: up to 2000 homes		
protection and enhancement of heritage assets, the historic environment and its setting	negative effects on the settings of these Listed Buildings and possibly the Conservation Area. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects with the potential for a residual neutral effect. The option also includes a number of Archaeological Notification Areas¹¹⁵, in which development (according with draft Local Plan Policy Archaeology) could contribute to investigating and recording heritage assets of archaeological significance. Likely neutral effects but uncertainty until site level assessments have been completed.	

¹¹⁵ Central Bedfordshire Council (2016) GIS Map Layers

Growth Location: Marston Vale Number of Dwellings: New settlement up to 5000 homes		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The delivery of up to 5000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire with the potential for major long-term positive effects. It is assumed that development at the growth location can meet the policy objectives of draft Local Plan policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.	++
2. Communities¹¹⁶ To maintain and enhance community and settlement identities	Housing growth in this broad location will expand the urban area of Marston Moretaine south and result in the direct coalescence of Marston Moretaine and Lidlington, with the potential for long term negative effects against SA Objective 2. Development in this area will not result in the loss of any Green Belt land and neutral effects. Development in this area could integrate well with the existing urban areas of Marston Moretaine and Lidlington, but will directly negative effect the individual identities of these settlements. Overall, it is considered to have the potential for long-term cumulative negative effect against SA Objective 2; however, a new settlement offers opportunities for exemplar design and the extent of mitigation possibilities is not known at this stage so uncertainty remains.	0 -?
3. Services & Facilities To improve accessibility to services and facilities ¹¹⁷	Development at the growth location is in close proximity to services and facilities available within Marston Moretaine and Lidlington. Given the scale of development at the site it is considered that there is also the potential for significant provisions to support improved accessibility in this area, with the potential for a major long term positive effect against SA Objective 3. This is supported by draft Local Plan policy (Connectivity and Accessibility).	++

¹¹⁶ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹¹⁷ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Marston Vale Number of Dwellings: New settlement up to 5000 homes			
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The growth location has been identified for the development of housing and as such is unlikely to lead to any significant effects against this SA Objective, with the potential for a neutral effect.	0	+
	The location is in close proximity along the A421 to Bedford and Milton Keynes as major employment sources for Central Bedfordshire. It is connected by rail to these two areas which is likely to increase accessibility to employment areas with the development of the East-West Rail Link and proximity to Ridgmont station to the south west, further supporting the vitality and viability of these town centres, as well as local centres such as Ampthill, with the potential for minor long term and cross-boundary positive effects.		
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location is not in an area of higher deprivation and thus unlikely to lead to any significant effects.	0	++
	The Environmental Framework ¹¹⁸ identifies this area as located within Marston Vale, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. Development in this area can also support the objectives of the Community Forest of Marston Vale and support increased connectivity and regenerate land marred by industrialisation (from the brick making industry). It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects against SA Objective 5.		
6. Highways & Air Quality To maintain and improve the existing highway network and reduce	Early transport modelling ¹¹⁹ identifies that infrastructure improvements, such as to the M1 J13 and other local highway issues, would be crucial given the level of stress on the strategic routes in this area. Also, it is understood that removal of railway level crossings at Lidlington and Millbrook would be required due to safety considerations. It is possible that increases in traffic could also be mitigated through good access to public transport networks with likely neutral residual effects - but	0?	

¹¹⁸ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

¹¹⁹ Aecom (2016) Technical Note Stage 1A Growth Area Analysis

Growth Location: Marston Vale Number of Dwellings: New settlement up to 5000 homes		
associated indirect impacts on air quality and greenhouse gas emissions	uncertainty at this stage. Given the scale of development it is anticipated that development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect with an element of uncertainty at this stage. There is an AQMA in Ampthill¹²⁰. However, the broad area option is located some distance from this such that mitigation measures should be effective with likely neutral effects. The Energy Recovery Facility at Rookery Pit South and Brogborough Landfill Gas Power station are in relatively close proximity to the locational area and as such air quality will need to be considered in the context of future occupiers; Development Management Policies CC7 Pollution and HQ1 Health Impact Assessment should provide mitigation measures.	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The location is well connected to the existing urban areas of Marston Moretaine and Lidlington, which are both served by bus services. It is anticipated that growth in this location could accommodate viable extensions to such services through appropriate development contributions. Development at the location could also be well connected to the branch line railway Millbrook Station located in the east of the broad location, with the potential for a minor long term positive effect. The development of the East-West Rail Link and the area's proximity to Ridgmont station to the south west will support sustainable transport objectives with positive effects. The size and scope of a new settlement also offers strong opportunities through early masterplanning and creative design to provide exemplar opportunities for sustainable transport with positive effects.	+
8. Energy & Climate Change To maximise the potential	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility).	+?

¹²⁰ <https://uk-air.defra.gov.uk/aqma/maps>

Growth Location: Marston Vale Number of Dwellings: New settlement up to 5000 homes		
for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ¹²¹	It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited and tied to a Common End Date (CED) of March 2028. It is also recognised¹²² that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 5000 new homes in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW	0

¹²¹ Please note that Flood Risk is considered by the SA within objective number 10

¹²² LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

Growth Location: Marston Vale Number of Dwellings: New settlement up to 5000 homes		
	upgrades With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the location option¹²³, in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect.	0
	Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but uncertain at this stage of appraisal. Likely residual neutral effects.	
11. Soil To protect and conserve soil	Development in this broad location will predominantly result in the loss of greenfield land with the potential for minor long-term negative effects.	-?
	Small areas of Grade 3a best and most versatile agricultural land have been identified within the location¹²⁴, and the loss of these areas has the potential for permanent major negative effects against SA Objective 11. Development can avoid these areas to reduce the extent of the negative effects, however it is recognised that there remains an element of uncertainty until a precise location has been identified. Given that the location is greenfield land, development is unlikely to contain or require remediation for any contaminated land.	
12. Biodiversity & Geodiversity To protect, enhance and	There are no internationally designated sites in or around the broad growth location. To the north-west of the growth location is Marston Thrift SSSI and Local Nature Reserve (LNR)¹²⁵, which is an example of ash/maple woodland¹²⁶. To the east of the growth location is Kings Wood and Glebe	+

¹²³ Environment Agency (2016) Flood Map for Planning

¹²⁴ DEFRA (2016) Magic Map Application

¹²⁵ DEFRA (2016) Magic Map Application

¹²⁶ Marston Thrift Citation (1984) [Online: 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1000684.pdf

Growth Location: Marston Vale Number of Dwellings: New settlement up to 5000 homes		
manage biodiversity & geodiversity	Meadows SSSI and LNR, another example of ash/maple woodland¹²⁷. To the south-west is Cooper's Hill SSSI and LNR, one of the best remaining examples in Bedfordshire of Lowland Heath¹²⁸. Due to the size of the growth location development may affect these sites. This may occur through increased recreation use from future residents resulting in habitat disturbance and destruction. Other possible impacts may be increased noise and light pollution having adverse effects on local wildlife residing at these sites. The growth location and surrounding land is mostly greenfield with a range of hedgerows present, and the damage or loss of hedgerows would have an impact on ecological corridors. Mitigation is provided through draft Local Plan policy (Nature Conservation) which ensures that development will not adversely affect designated biodiversity. There are a number of locally designated County Wildlife Sites (CWS) in and around the broad growth location. Within the growth location there are blocks of Deciduous Woodland Priority Habitat, Lowland Fens Priority Habitat, Semi-Improved Grassland Priority Habitat, Lowland Meadows Priority Habitat and Lowland Dry Acid Grassland Priority Habitat¹²⁹. Biodiversity network is located largely to the south, to the west, and in and to the east of the development location. Development in this growth location therefore has the potential to result in fragmentation of Priority Habitats and the disruption of local wildlife. Mitigation is provided through draft Local Plan policy (Nature Conservation) which seeks to ensure that development does not adversely affect designated biodiversity sites, and draft Local Plan policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. A small amount of the growth location in the south is also located in the Nature Improvement Area (NIA), providing opportunities to improve the NIA's and Central Bedfordshire's biodiversity network. The area around the growth location has a high number of Priority Habitats and nationally and locally designated biodiversity sites. Improving existing ecological corridors between sites and habitats within the NIA and sites and habitats outside the NIA will benefit both the NIA and surrounding ecosystem, and help meet NIA targets of strengthening ecological networks. Providing connections for current residents and future residents between the growth location and the NIA would also provide benefits for resident's health and help meet targets of enhancing public awareness and providing opportunities for people to access and experience the Ridge. Potential	

¹²⁷ Kings Wood and Glebe Meadows Citation (1998) [Online: 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1000638.pdf

¹²⁸ Cooper's Hill Citation (1998) [Online: 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1000484.pdf

¹²⁹ DEFRA (2016) Magic Map Application

Growth Location: Marston Vale Number of Dwellings: New settlement up to 5000 homes		
	for long-term minor positive effects. These enhancements would help meet the aims of the Central Bedfordshire Nature Conservation Strategy¹³⁰ and the Central Bedfordshire Environmental Framework¹³¹. The growth location is also located in the Forest of Marston Vale, a community forest made up of a patchwork of woodlands which includes local SSSI and LNR sites. The aim of the designation is to regenerate the industrially scarred landscape, whilst meeting objectives which include creating new opportunities for nature conservation, improving access for all and encourage community commitment to the concept¹³². Development in this broad location could support the objectives of the Forest of Marston vale with the potential for minor long term positive effects. The creation of the Bedford & Milton Keynes Waterway¹³³, which will pass to the east of Marston Moretaine, will provide enhancement to the local biodiversity and GI networks, providing blue and green corridors which will allow wildlife movement and creating new habitat areas, with biodiversity gains.	
13. Landscape Protect and enhance the landscape and townscape	This growth location is not located adjacent to or within the designated AONB landscape. The broad location is within the Bedfordshire and Cambridgeshire Claylands National Character Area, and the statements of environmental opportunity identify the potential to create high quality green infrastructure (identified against SA Objective 5) and landscape regeneration in new development and the need to protect the aquifers and quality of the River Great Ouse (SA Objective 9 outlines the available mitigation for such effects). Development in this broad location is considered overall to support these objectives with the potential for minor long term positive effects against SA Objective 13.	+
14. Historic Environment To ensure the protection and enhancement of	There are a small number of Archaeological Notification Areas within the location¹³⁴, in which development (according with draft Local Plan policy Archaeology) could contribute to investigating and recording heritage assets of archaeological significance.	0?

¹³⁰ Central Bedfordshire Council (2015) Central Bedfordshire Nature Conservation Strategy

¹³¹ Central Bedfordshire Council (no date) Environmental Framework

¹³² <http://marstonvale.org/>

¹³³ <http://www.b-mkwaterway.org.uk/the-waterway/route/>

¹³⁴ Central Bedfordshire Council GIS Map Layers

Growth Location: Marston Vale Number of Dwellings: New settlement up to 5000 homes		
heritage assets, the historic environment and its setting	The broad location contains Listed Buildings (including Thrupp End Farmhouse, and the stone known as the devil's toenail) and a Scheduled Monument. The Medieval village and moated sites at Thrupp End Scheduled Monument¹³⁵ are the remains of a deserted village known from low earthworks and aerial photography. The moats are considered to have been part of the medieval manor known as 'Goldington's Manor' belonging to the Abbess of Barking and held by the Goldington family from at least the 15th century. It is possible that the Manor House stood on the site of the present Thrupp End Farm House Listed Building. Development in this broad location may also affect the settings of Listed Buildings in the south west of the Marston Moretaine settlement and Listed Buildings in Lidlington. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects on the settings of the Listed Buildings and Scheduled Monument, with the potential for a residual neutral effect. There remains an element of uncertainty until site level assessments have been completed.	

¹³⁵ <https://historicengland.org.uk/listing/the-list/list-entry/1010364>

Growth Location: Tempsford South and Tempsford Airfield Number of Dwellings: New settlement up to 7000 homes		
SA Topic & Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The delivery of up to 7000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire with the potential for major long-term positive effects. It is assumed that development at the growth location can meet the policy objectives of draft Local Plan policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.	++
2. Communities¹³⁶ To maintain and enhance community and settlement identities	Housing growth in this broad locational option will stand alone between the settlements of Tempsford, Everton and Sandy. Although this will not contribute to coalescence, due to the self-contained nature of development it is less likely to integrate well with the existing urban form, and will form a new and separate community identity, with the potential for long term positive effects. Development in this area will not result in the loss of any Green Belt land with neutral effects.	0 +
3. Services & Facilities To improve accessibility to services and facilities ¹³⁷	Development at the option is in close proximity to services and facilities available within Sandy, Tempsford and Everton. Given the scale of development at the site it is considered that there is also the potential for significant provisions to support improved accessibility in this area, with the potential for a major long term positive. This is supported by draft Local Plan policy (Connectivity and Accessibility).	++
4. Employment To support the economy and ensure that there are suitable opportunities for	The option has been identified for the development of housing and as such is unlikely to lead to any significant effects, with the potential for a neutral effect. The location is in close proximity to Bedford as a major employment source for Central Bedfordshire and is located close to a strategic rail connection route with a mainline railway station in the centre of Sandy	0 +

¹³⁶ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹³⁷ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Tempsford South and Tempsford Airfield Number of Dwellings: New settlement up to 7000 homes			
employment	which is likely to increase accessibility to employment areas in this respect. Development in this location may also support the vitality and viability of Sandy town centre, with the potential for minor long term positive effects. Also, access on the A1 north and south to other employment areas.		
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The option will provide development in close proximity to an area of higher deprivation (Sandy¹³⁸). Development therefore has the potential to improve accessibility in these areas and reduce inequalities with the potential for major long-term and cumulative positive effects. There is the potential for noise associated with the A1 and the mainline railway; also, a nearby composting facility with potential issues for odours. Development Management Policies CC7 Pollution and HQ1 Health Impact Assessment provide mitigation measures but some uncertainty remains at this strategic stage of assessment. The Environmental Framework¹³⁹ identifies this area as located within the Ivel River Valley, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects.	++?	++
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Early transport modelling¹⁴⁰ identifies that all new potential growth in this area is likely to have an impact on the A1 and cause further congestion such that infrastructure improvements are likely to be required. It is understood that the existing level crossing between Tempsford and Everton would be required to be removed. The crossing goes over the mainline between Edinburgh and Kings Cross (London) and causes significant waiting times and delays to traffic. Without the removal of this level crossing it is not considered that this site would be acceptable in this respect. Otherwise, some mitigation could be provided through good access to public transport networks. Given the scale of development is it anticipated that development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect but an element of uncertainty at this stage.	0?	

¹³⁸ Deprivation Statistics and census information [online] <http://www.centralbedfordshire.gov.uk/council/census/deprivation.aspx>

¹³⁹ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

¹⁴⁰ Aecom (2016) Technical Note Stage 1A Growth Area Analysis

Growth Location: Tempsford South and Tempsford Airfield Number of Dwellings: New settlement up to 7000 homes		
	There is an AQMA in Sandy ¹⁴¹ . However, the broad area option is located some distance from this AQMA such that mitigation measures should be effective with likely neutral effects, although some uncertainty regarding potential poor air quality from the A1 traffic.	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The option is not directly connected to any of the existing urban areas. The urban area of Sandy is located around 4 miles away, along Tempsford Road and Everton Road which is also the closest route connection to Sandy Station ¹⁴² . The smaller settlement of Everton is located around 1.5 miles away which provides bus connections (route numbers 2, 18, 127 188, 190 and 193 ¹⁴³).	-?
	Overall it is considered that development at the location is unlikely to support a modal shift with the potential for a minor negative effect, although there may be scope for a sustainable future connection to the East-West Rail Link, so some uncertainty remains at this stage.	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ¹⁴⁴	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility).	+?
	It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	
9. Water Resources & Quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited	0

¹⁴¹ <https://uk-air.defra.gov.uk/aqma/maps>

¹⁴² Google Maps estimated drive time from Tempsford Road to Sandy Station.

¹⁴³ Google Maps

¹⁴⁴ Please note that Flood Risk is considered by the SA within objective number 10

Growth Location: Tempsford South and Tempsford Airfield Number of Dwellings: New settlement up to 7000 homes		
To minimise the demand for water and maintain or improve water quality	and tied to a Common End Date (CED) of March 2028. It is also recognised¹⁴⁵ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 7000 new homes in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all	Though there are areas of flood risk within the location option¹⁴⁶, in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect.	0

¹⁴⁵ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

¹⁴⁶ Environment Agency (2016) Flood Map for Planning

Growth Location: Tempsford South and Tempsford Airfield Number of Dwellings: New settlement up to 7000 homes		
sources	Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but uncertain at this stage of appraisal. Likely residual neutral effects.	
11. Soil To protect and conserve soil	Development in this area will predominantly result in the loss of greenfield land (with the exception of the runway and associated airfield buildings) with the potential for minor long-term negative effects. There is Grade 2 best and most versatile agricultural land in the broad growth location, and Grade 3 agricultural land (sub-grade 3a or 3b not known)¹⁴⁷. It is recognised that there remains an element of uncertainty in the agricultural land classification until lower level site assessments have been completed. Given the nature of the land use at Tempsford Airfield there may be some contamination constraints. Draft Local Plan policy (Pollution) should ensure that there will be no significant effects on health, and project level mitigation can ensure the appropriate remediation if necessary with the potential for minor positive effects through land restoration. Overall, minor negative effects through loss of greenfield at this stage but with some uncertainty remaining.	-?
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	The growth location option is not located near any internationally designated sites or located in the Nature Improvement Area, however there are a number of nationally designated sites to the east. Weaveley & Sand Woods SSSI is to the east of the growth location¹⁴⁸, and contains Ancient Woodland with a mix of species, and an additional interest due to the underlying geology¹⁴⁹; also, Gamlingay Wood SSSI¹⁵⁰, which holds well developed plant and animal communities¹⁵¹. Possible impacts on these SSSI sites could occur through noise and light pollution caused by new development, increased recreation use from future residents and possible loss of ecological corridors. However, due to the distance of the SSSIs from the growth option these negative effects would be minimal, and mitigation is provided through draft Local Plan policy (Nature Conservation) with a likely residual neutral effect. Within the growth location option there is a County Wildlife Site (CWS) and some small areas of Deciduous Woodland Priority Habitat, with additional CWSs a short distance to the east. Potential	+?

¹⁴⁷ Central Bedfordshire Council GIS layers (2017)

¹⁴⁸ Ibid.

¹⁴⁹ Weaveley & Sand Wood Citation (1983) [Online 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1003181.pdf

¹⁵⁰ DEFRA (2016) Magic Map Application

¹⁵¹ Gamlingay Wood Citation (1983) [Online 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1001138.pdf

Growth Location: Tempsford South and Tempsford Airfield Number of Dwellings: New settlement up to 7000 homes		
	negative effects are mitigated through draft Local Plan policy (Nature Conservation) and draft Local Plan policy (Enhancing Ecological Networks) that further seeks to ensure that development positively contributes to biodiversity. The option is not located within the biodiversity elements of the Priority Corridors as set out in the Central Bedfordshire Nature Conservation Strategy¹⁵² & Strategic Green Infrastructure Plan. Whilst new development can provide biodiversity enhancements, these would not progress strategic aims with less possibilities for positive effects. Therefore, there is the potential for minor positive effects in the longer term but uncertain at this stage until more detailed studies.	
13. Landscape Protect and enhance the landscape and townscape	The option is not located adjacent to or within the designated AONB landscape and therefore, no major significant negative effects. The option is predominantly within the Bedfordshire Greensand Ridge National Character Area¹⁵³, and the statements of environmental opportunity identify the need to protect long open views and high levels of tranquillity, as well as the Ridge's aquifer. Development in this broad location is considered likely to impact upon the open character and levels of tranquillity with the potential for minor long term negative effects. Mitigation possibilities uncertain until further studies undertaken.	-
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Growth in this option would be in close proximity to a Listed Building at Gibraltar Farm (Gibraltar Farm Barn) in the east, as well as the Biggin Wood moated enclosure Scheduled Monument (and Archaeological Notification Area) in the west and within the setting of the Woodbury Moated Site, Scheduled Monument. Records¹⁵⁴ indicate that Biggin Wood is an above average example of a Bedfordshire moated enclosure, and is thought to include the remains of the important residence of Everton Biggin manor. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects on the setting of the Listed Building and Scheduled Monument, with the potential for a residual neutral effect. There remains an element of uncertainty until site level assessments have been completed.	0?

¹⁵² Central Bedfordshire Council (2015) Central Bedfordshire Nature Conservation Strategy

¹⁵³ LUC for Central Bedfordshire Council Landscape Character Areas (2015)

¹⁵⁴ <https://historicengland.org.uk/listing/the-list/list-entry/1012451>

Growth Location: Wixams South Number of Dwellings: up to 1000 homes			
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty		
1. Housing To ensure that the housing needs of all residents and communities are met	The delivery of up to 1000 new homes can make a significant contribution to achieving the overall housing needs of Central Bedfordshire with the potential for major long-term positive effects. It is assumed that development at the growth location can meet the policy objectives of draft Local Plan policy (Housing Mix) to provide an appropriate mix of housing types, tenures and sizes.		++
2. Communities¹⁵⁵ To maintain and enhance community and settlement identities	Development in this area will not result in the loss of any Green Belt land and neutral effects. Housing growth in this broad location will expand the urban area of Wixams south and contribute to coalescence between Wixams and Wilstead, although the A6 creates a barrier between the two settlements. There is the potential for coalescence with Houghton Conquest in the south. The contribution to coalescence of the settlements is considered to have the potential for minor long term negative effects on community identities; some uncertainty at this stage of assessment.		0 -?
3. Services & Facilities To improve accessibility to services and facilities ¹⁵⁶	Development at the growth location is in close proximity to services and facilities available within Wixams, Wilstead, Houghton Conquest and Bedford. Given the scale of development at the site it is considered that there is also the potential for significant provisions to support improved accessibility in this area, with the potential for a major long term positive effect against SA Objective 3. This is supported by draft Local Plan policy (Connectivity and Accessibility).		++
4. Employment To support the	The growth location has been identified for the development of housing and as such is unlikely to lead to any significant effects against this SA Objective, with the potential for a neutral effect.		0 +

¹⁵⁵ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹⁵⁶ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Wixams South Number of Dwellings: up to 1000 homes			
economy and ensure that there are suitable opportunities for employment	The location is in close proximity to Bedford as a major employment source for Central Bedfordshire and is located in close proximity a strategic rail connection route which is likely to increase accessibility to employment areas and support the vitality and viability of the town centre, with the potential for minor long term and cross-boundary positive effects.		
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location is not in an area of higher deprivation and thus unlikely to lead to any significant effects. The Environmental Framework¹⁵⁷ identifies that this area is not located within a priority corridor of the strategic green infrastructure network, however development in this area can also support the objectives of the Community Forest of Marston Vale and support increased connectivity and regenerate land marred by industrialisation (from the brick making industry). It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects against SA Objective 5.	0	++
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions.	Early transport modelling¹⁵⁸ identifies that infrastructure improvements would be crucial given the level of stress on the strategic routes in this area, including the A6 and Ampthill Road to Bedford and south on the A6. However, any increase in traffic could potentially be mitigated through good access to public transport networks. Given the scale of development is it anticipated that development can provide significant infrastructure investment, and mitigation is provided through draft Local Plan policy (Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles) with the potential for a residual neutral effect with an element of uncertainty at this stage. There is an AQMA in Ampthill¹⁵⁹. However, the broad area option is located some distance from the AQMA such that mitigation measures should be effective with likely neutral effects.	0?	

¹⁵⁷ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

¹⁵⁸ Aecom (2016) Technical Note Stage 1A Growth Area Analysis

¹⁵⁹ <https://uk-air.defra.gov.uk/aqma/maps>

Growth Location: Wixams South Number of Dwellings: up to 1000 homes		
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel.	The location is well connected to the existing urban area of Wixams, and there is a railway connection relatively close at Kempston Hardwick. Development should seek to enhance access to the railway station with the potential for a minor long term positive effect. There is a proposed station at Wixams main settlement, that once built out will have significant positive effects for sustainable transport in the area – connections to Bedford and south to Luton and London.	+
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ¹⁶⁰	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility). It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places,) development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. There may be an opportunity to connect to heat network of the proposed Energy from Waste Facility at Rookery Pit South. Potential for a long term minor positive effect but some uncertainty at this stage.	+?
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited and tied to a Common End Date (CED) of March 2028. It is also recognised¹⁶¹ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of 1000 new homes in this area is therefore considered to have the potential for	0

¹⁶⁰ Please note that Flood Risk is considered by the SA within objective number 10

¹⁶¹ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

Growth Location: Wixams South Number of Dwellings: up to 1000 homes		
	cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades. With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the location option¹⁶², in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect. Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but uncertain at this stage of appraisal. Likely residual neutral effects.	0
11. Soil To protect and conserve soil	Development in this broad location will predominantly result in the loss of greenfield land with the potential for minor long-term negative effects. Grade 3 best and most versatile (sub-grade3a or 3b not known)¹⁶³ agricultural land has been identified within the broad location at this stage¹⁶⁴, however it is recognised that there remains an element of uncertainty in the agricultural land classification until lower level site assessments have	-?

¹⁶² Environment Agency (2016) Flood Map for Planning

¹⁶³ Central Bedfordshire Council GIS layers (2017)

¹⁶⁴ DEFRA (2016) Magic Map Application

Growth Location: Wixams South Number of Dwellings: up to 1000 homes		
	been completed. Given that the location is greenfield land, development is unlikely to contain or require remediation for any contaminated land, however it should be noted that this is under the assumption that the broad area does not contain any of the Wilstead Industrial Park land.	
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	There is no internationally designated biodiversity in or around the proposed growth location. South of the growth location is Kings Wood and Glebe Meadows SSSI and Local Nature Reserve (LNR)¹⁶⁵ an example of ash/maple woodland¹⁶⁶. South of the growth location is also a cluster of SSSI sites, Maulden Heath SSSI, Maulden Wood and Pennyfather's SSSI and Maulden Church Meadow SSSI and Local Nature Reserve (LNR)¹⁶⁷. Development in this growth location could result in a range of negative effects on the SSSI sites, which includes an increase in traffic along the A6 which passes directly by three of the SSSI sites. The increase in traffic would result in an increase in atmospheric pollutants, noise pollution and light pollution resulting in negative effects on the SSSIs. Other negative effects stemming from development include an increase in recreational use of the sites resulting in disturbance and damage. Mitigation is provided through draft Local Plan policy (Nature Conservation) which ensures that development will not adversely affect designated biodiversity. There are a number of County Wildlife Sites (CWS) in the land surrounding the growth location, with the land to the west having the highest number of CWSs due to the presence of abandoned quarry pits and lakes which have since been designated as wildlife sites¹⁶⁸. Development at the growth location could negatively affect the CWSs by increasing traffic along the B530 which passes directly adjacent to the sites to the west. There are a small range of Priority Habitats in the land surrounding the growth location, which includes areas of Deciduous Woodland Priority Habitat to the west and south of the growth location and some small areas of Lowland Meadows Priority Habitat to the east and south. However, mitigation is provided through draft Local Plan policy (Nature Conservation) seeks to ensure that development does not adversely affect designated sites, and draft Local Plan policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. The growth location is not located in the biodiversity network, however the land to the west, around the CWSs, is in the biodiversity network. The Greensand Ridge Nature Improvement Area	+

¹⁶⁵ DEFRA (2016) Magic Map Application

¹⁶⁶ Kings Wood and Glebe Meadows Citation (1998) [Online: 2016] http://www.sssi.naturalengland.org.uk/citation/citation_photo/1000638.pdf

¹⁶⁷ DEFRA (2016) Magic Map Application

¹⁶⁸ Ibid.

Growth Location: Wixams South Number of Dwellings: up to 1000 homes		
	(NIA) is also just south of the growth location. Therefore, there is the scope to make a range of improvements to the local biodiversity network. The creation of new ecological corridors that links the biodiversity network to the west with the biodiversity network further south of the growth location could incorporate the SSSI and LNR sites in the area with wide ranging benefits for local wildlife. Enhancing connections between the growth location and the NIA through the creation of new ecological corridor or 'stepping stone' sites would enhance the ecological value of both the areas. The growth location is also located in the Forest of Marston Vale. Development in this broad location could help support the objectives of the Forest of Marston Vale. These enhancements would help meet the aims of the Central Bedfordshire Nature Conservation Strategy¹⁶⁹ and the Central Bedfordshire Environmental Framework¹⁷⁰. Overall it is considered that there is the potential for long-term minor positive effects.	
13. Landscape Protect and enhance the landscape and townscape	This growth location is not located adjacent to or within the designated AONB landscape. The broad location is within the Bedfordshire and Cambridgeshire Claylands National Character Area, and the statements of environmental opportunity identify the potential to create high quality green infrastructure (identified against SA Objective 5) and landscape regeneration in new development and the need to protect the aquifers and quality of the River Great Ouse. Development in this broad location is considered overall to support these objectives with the potential for minor long term positive effects against SA Objective 13 with an element of uncertainty at this stage.	+
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	The growth location does not contain any Archaeological Notification Areas. The broad location does not contain any designated heritage assets, however it is located in close proximity to Listed Buildings in Wilstead, particularly around Duck End Farm. Given the scale of development at this location it is likely to affect the open countryside setting of these Listed Buildings. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects on the settings of the Listed Buildings, with the potential for a residual neutral effect. There remains an element of uncertainty until site level assessments have been completed.	0?

¹⁶⁹ Central Bedfordshire Council (2015) Central Bedfordshire Nature Conservation Strategy

¹⁷⁰ Central Bedfordshire Council (no date) Environmental Framework

Growth Location: Area A Villages Number of Dwellings: up to 2000 homes dispersed through villages			
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty		
1. Housing To ensure that the housing needs of all residents and communities are met	Development in the villages located within area A has the potential for positive effects on housing by meeting the housing needs of the local population, and potentially providing a mix of development which could meet the needs of different members of communities, with a minor positive effect but some uncertainty at this stage as depends upon precise locations.		+ ?
2. Communities¹⁷¹ To maintain and enhance community and settlement identities	Development in this area would necessitate the release of Green Belt with a major negative effect. Some of the Green Belt land in the area has been shown to only have a weak contribution to the Green Belt, and therefore development within the area could be guided accordingly to avoid areas of Green Belt land at this stage uncertainty remains. There is a risk of the coalescence of individual settlements within the area as a cumulative result of proposed development, and this could have a negative effect on the separate identities of both communities and settlements with a resulting major negative effect – but much uncertainty at this stage as the location of dispersal and at which villages is unknown, mitigation may be possible by locational specificity.		--? --?
3. Services & Facilities To improve accessibility to services and facilities ¹⁷²	Development has the potential to provide new services and facilities within the local villages, or enhance existing provision. Development can be guided towards the villages which have existing services/facilities, overall potential for a minor positive effect.		+ ?

¹⁷¹ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹⁷² This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

4. Employment To support the economy and ensure that there are suitable opportunities for employment	No employment land is being proposed, with a neutral effect. Potential for a minor positive effect as development in the area has the potential to improve and support the vitality of local villages and support the economy by using local services/facilities.	0	+?
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	Villages in the south of the Area are near/adjacent to an area of high deprivation (Luton) and therefore development in the area has the potential to improve accessibility in these areas and reduce inequalities with the potential for minor long-term and cumulative positive effects. Development could provide enhancements to multiple green infrastructure priority corridors located in the area, and possibly provide new green infrastructure for local villages, with a minor positive effect on health.	+?	+?
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	The area has a largely rural road network, and development will lead to an increase in traffic on the local road network. An increase in traffic has the potential for an increase in congestion in local villages and rural roads where existing congestion may be an issue, with a minor negative effect. Development could be guided towards areas where there is easy access to the major road network and where there are no identified congestion issues.	-	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	Development in the area could provide new sustainable transport links in the form of bus stops, footpaths or cycle paths with a minor positive effect. Enhancements to the existing sustainable transport network could also be provided, and development could either be guided towards areas where there are existing transport links, or guided towards area where development has the potential to provide enhancements, with an overall minor positive effect.	+?	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its	Development in the area has the potential to improve or provide new sustainable transport links which will help reduce greenhouse gas emissions in the area. Furthermore, through compliance with draft Local Plan policy (Successful and Sustainable Places,) development in the area could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Overall minor positive effect.	+?	

communities withstand the effects of climate change ¹⁷³		
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development in the area supports local WRMPs with high water efficiency targets.	0
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the area, in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect.	0
11. Soil To protect and conserve soil	Development in the area has the potential to result in the loss of best and most versatile agricultural land (Grade 1 and 2), and will also result in the loss of greenfield land, with a minor negative effect.	- ?
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	Within the area there are numerous local and national biodiversity designated sites, as well as areas of Priority Habitat. Development could result in the loss or fragmentation of Priority Habitat, or increase pressures on designated sites with negative effects on biodiversity. However, there is Policy mitigation (Nature Conservation, Enhancing Ecological Networks) which will ensure biodiversity is protected. Development has the potential to enhance local biodiversity by providing habitat linkages, improving awareness of local biodiversity through studies and education, and using ecologically appropriate landscaping. Potential for a minor positive effect.	+?
13. Landscape Protect and enhance the landscape and townscape	The area where development could be located is within the Green Belt, and therefore would result in the loss of Green Belt land, with the potential for major negative effects on landscape. Overall potential for a major negative effect as the effectiveness of any mitigation measures is	--?

¹⁷³ Please note that Flood Risk is considered by the SA within objective number 10

	uncertain at this stage.	
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Throughout the area there are numerous heritage designations, including Conservation Areas, Listed Buildings, Archaeological Notification Areas and Scheduled Monuments. Development could have a negative effect, including on the setting of local heritage. However, mitigation is provided through draft Local Plan policy (Built Heritage) which will protect heritage, and development can be guided away from areas with particular heritage/historic sensitivity, with the potential for a residual neutral effect.	0?
There is some uncertainty remaining at this stage of assessment for many of the SA Objectives as the specific location of smaller development in villages and dispersed throughout the area is not yet known.		

Growth Location: Area B Villages Number of Dwellings: up to 2000 homes dispersed through the Villages		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	Development in the villages located within Area B has the potential for positive effects on housing by meeting the housing needs of the local population, and potentially providing a mix of development which could meet the needs of different members of communities, with a minor positive effect but some uncertainty at this stage as depends upon precise locations.	+ ?
2. Communities¹⁷⁴ To maintain and enhance community and settlement identities	There is no Green Belt designated land within the Area, and therefore a neutral effect. Development in the villages has the potential for negative effects on identities with minor negative effects but uncertain at this stage of assessment.	0 - ?
3. Services & Facilities To improve accessibility to services and facilities ¹⁷⁵	Development has the potential to provide new services and facilities within the local villages, or enhance existing ones. Development can be guided towards the villages which have existing services/facilities, overall potential for a minor positive effect.	+ ?
4. Employment To support the economy and ensure that there are suitable opportunities for employment	No employment land is being proposed, with a neutral effect. Potential for a minor positive effect as development in the area has the potential to improve and support the vitality of local villages and support the economy by using local services/facilities.	0 + ?

¹⁷⁴ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹⁷⁵ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Area B Villages			
Number of Dwellings: up to 2000 homes dispersed through the Villages			
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	Generally, an overall neutral effect, although there may be opportunities for development in villages that might support accessibility and the area of deprivation at Sandy. Development could provide enhancements to multiple green infrastructure priority corridors located in the area, and possibly provide new green infrastructure for local villages, with a minor positive effect on health.	0	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	There is the potential for an increase in traffic in the local areas because of development. There are existing congestion issues in the area, and the areas road network is predominantly rural with the exception of the A1. There is the potential for an increase in congestion in local villages and rural roads where existing congestion is an issue, with a minor negative effect. Development could be guided towards areas where there is easy access to the major road network and where there are no identified congestion issues.	-	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	Sustainable transport links in the area include bus routes and a railway line. Development could provide enhancements to local sustainable transport, provide new sustainable transport routes such as footpaths and cycle paths, and could be located close to existing links, with a minor positive effect.		+
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the	Development in the area has the potential to improve or provide new sustainable transport links which will help reduce greenhouse gas emissions in the area. Furthermore, through compliance with draft Local Plan policy (Successful and Sustainable Places,) development in the area could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Overall minor positive effect.		+

Growth Location: Area B Villages		
Number of Dwellings: up to 2000 homes dispersed through the Villages		
effects of climate change ¹⁷⁶		
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development in the area supports local WRMPs with high water efficiency targets.	0
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the area, in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect.	0
11. Soil To protect and conserve soil	Development in the area has the potential to result in the loss of greenfield land and best and most versatile agricultural land (Grade 1 and 2), with a minor negative effect.	- ?
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	Within the area there are numerous local and national biodiversity designated sites, as well as areas of Priority Habitat. Development could result in the loss or fragmentation of Priority Habitat, or increase pressures on designated sites with negative effects on biodiversity. However, there is Policy mitigation (Nature Conservation, Enhancing Ecological Networks) which will ensure biodiversity is protected. Development has the potential to enhance local biodiversity by providing habitat linkages, improving awareness of local biodiversity through studies and education, and using ecologically appropriate landscaping. Potential for a minor positive effect.	+?

¹⁷⁶ Please note that Flood Risk is considered by the SA within objective number 10

Growth Location: Area B Villages		
Number of Dwellings: up to 2000 homes dispersed through the Villages		
13. Landscape Protect and enhance the landscape and townscape	Development within the villages has the potential to affect the rural nature of the landscape, with development potentially being located in areas which have a high landscape sensitivity. Potential for a minor negative effect.	-?
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Throughout the area there are numerous heritage designations, including Conservation Areas, Listed Buildings, Archaeological Notification Areas and Scheduled Monuments. Development could have a negative effect, including on the setting of local heritage. However, mitigation is provided through draft Local Plan policy (Built Heritage) which will protect heritage, and development can be guided away from areas with particular heritage/historic sensitivity, with the potential for a residual neutral effect.	0?
There is some uncertainty remaining at this stage of assessment for many of the SA Objectives as the specific location of smaller development in villages and dispersed throughout the area is not yet known.		

Growth Location: Area C Villages Number of Dwellings: up to 2000 homes dispersed through villages		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	Development in the villages located within Area C has the potential for positive effects on housing by meeting the housing needs of the local population, and potentially providing a mix of development which could meet the needs of different members of communities, with a minor positive effect but some uncertainty at this stage as depends upon precise locations.	+ ?
2. Communities¹⁷⁷ To maintain and enhance community and settlement identities	There is no Green Belt designated land within the area, and therefore a neutral effect. Development in the villages has the potential for minor negative effects on their identities but uncertainty remains at this stage of assessment.	0 -?
3. Services & Facilities To improve accessibility to services and facilities ¹⁷⁸	Development has the potential to provide new services and facilities within the local villages, or enhance existing ones. Development can be guided towards the villages which have existing services/facilities, with an overall potential for a minor positive effect.	+ ?
4. Employment To support the economy and ensure that there are suitable opportunities for employment	No employment land is being proposed, with a neutral effect. Potential for a minor positive effect as development in the area has the potential to improve and support the vitality of local villages and support the economy by using local services/facilities.	0 + ?

¹⁷⁷ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹⁷⁸ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Area C Villages			
Number of Dwellings: up to 2000 homes dispersed through villages			
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	Generally, overall a neutral effect as developments dispersed throughout the villages are unlikely to have any effects on identified deprived areas. Development could provide enhancements to multiple green infrastructure priority corridors as well as the Greensand Ridge Nature Improvement Area, located in the area, and possibly provide new green infrastructure for local villages, with a minor positive effect on health.	0	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	There is the potential for an increase in traffic in the local areas because of development. There are existing congestion issues in the area, and the areas road network is predominantly rural with the exception of the A6 and the A421. There is the potential for an increase in congestion in local villages and rural roads where existing congestion is an issue, with a minor negative effect. Development could be guided towards areas where there is easy access to the major road network and where there are no identified congestion issues.	-	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	Sustainable transport links in the area include bus routes and a railway line. Development could provide enhancements to local sustainable transport, provide new sustainable transport routes such as footpaths and cycle paths, and could be located close to existing links, with a minor positive effect.	+	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the	Development in the area has the potential to improve or provide new sustainable transport links which will help reduce greenhouse gas emissions in the area. Furthermore, through compliance with draft Local Plan policy (Successful and Sustainable Places,) development in the area could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Overall minor positive effect.	+	

Growth Location: Area C Villages Number of Dwellings: up to 2000 homes dispersed through villages		
effects of climate change ¹⁷⁹		
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development in the area supports local WRMPs with high water efficiency targets.	0
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the area, in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect.	0
11. Soil To protect and conserve soil	Development in the area has the potential to result in the loss of greenfield land and best and most versatile agricultural land (Grade 1 and 2), with a minor negative effect.	- ?
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	Within the area there are numerous local and national biodiversity designated sites, as well as areas of Priority Habitat. Development could result in the loss or fragmentation of Priority Habitat, or increase pressures on designated sites with negative effects on biodiversity. However, there is Policy mitigation (Nature Conservation, Enhancing Ecological Networks) which will ensure biodiversity is protected. Development has the potential to enhance local biodiversity by providing habitat linkages, improving awareness of local biodiversity through studies and education, and using ecologically appropriate landscaping. Potential for a minor positive effect. Potential to provide improvements to the Greensand Ridge Nature Improvement Area and the Marston Vale Community Forest also.	+?

¹⁷⁹ Please note that Flood Risk is considered by the SA within objective number 10

Growth Location: Area C Villages		
Number of Dwellings: up to 2000 homes dispersed through villages		
13. Landscape Protect and enhance the landscape and townscape	Development within the villages has the potential to affect the rural nature of the landscape, with development potentially being located in areas which have a high landscape sensitivity. Potential for a minor negative effect.	-?
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Throughout the area there are numerous heritage designations, including Conservation Areas, Listed Buildings, Archaeological Notification Areas and Scheduled Monuments. Development could have a negative effect, including on the setting of local heritage. However, mitigation is provided through draft Local Plan policy (Built Heritage) which will protect heritage, and development can be guided away from areas with particular heritage/historic sensitivity, with the potential for a residual neutral effect.	0?
There is some uncertainty remaining at this stage of assessment for many of the SA Objectives as the specific location of smaller development in villages and dispersed throughout the area is not yet known.		

Growth Location: Area D Villages Number of Dwellings: up to 2000 homes dispersed through the villages		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	Development in the villages located within Area D has the potential for positive effects on housing by meeting the housing needs of the local population, and potentially providing a mix of development which could meet the needs of different members of communities, with a minor positive effect but some uncertainty at this stage as depends upon precise locations.	+ ?
2. Communities¹⁸⁰ To maintain and enhance community and settlement identities	There is no Green Belt designated land within the area, and therefore a neutral effect. Development in the villages has the potential for minor negative effects on identities but uncertainty at this stage.	0 -?
3. Services & Facilities To improve accessibility to services and facilities ¹⁸¹	Development has the potential to provide new services and facilities within the local villages, or enhance existing ones. Development can be guided towards the villages which have existing services/facilities, with an overall potential for a minor positive effect.	+ ?
4. Employment To support the economy and ensure that there are suitable opportunities for employment	No employment land is being proposed, with a neutral effect. Potential for a minor positive effect as development in the area has the potential to improve and support the vitality of local villages and support the economy by using local services/facilities.	0 + ?

¹⁸⁰ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹⁸¹ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

Growth Location: Area D Villages			
Number of Dwellings: up to 2000 homes dispersed through the villages			
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	Area D does not have any an identified high level of deprivation, and therefore, a neutral effect. Development could provide enhancements to multiple green infrastructure priority corridors as well as the Greensand Ridge Nature Improvement Area and Marston Vale Community Forest, located in the area, and possibly provide new green infrastructure for local villages, with a minor positive effect on health.	0	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	There is the potential for an increase in traffic in the local areas because of development. There are existing congestion issues in the area, and the areas road network is predominantly rural with the exception of the M1. There is the potential for an increase in congestion in local villages and rural roads where existing congestion is an issue. Development could be guided towards areas where there is easy access to the major road network and where there are no identified congestion issues.	-	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	Sustainable transport links in the area include bus routes and a railway line. Development could provide enhancements to local sustainable transport, provide new sustainable transport routes such as footpaths and cycle paths, and could be located close to existing links, with a minor positive effect.	+	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the	Development in the area has the potential to improve or provide new sustainable transport links which will help reduce greenhouse gas emissions in the area. Furthermore, through compliance with draft Local Plan policy (Successful and Sustainable Places,) development in the area could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Overall minor positive effect.	+	

Growth Location: Area D Villages Number of Dwellings: up to 2000 homes dispersed through the villages		
effects of climate change ¹⁸²		
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development in the area supports local WRMPs with high water efficiency targets.	0
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the area, in line with draft Local Plan policy (Flood Risk Management) it is expected that development would avoid these areas with the potential for a residual neutral effect.	0
11. Soil To protect and conserve soil	Development in the area has the potential to result in the loss of greenfield land and best and most versatile agricultural land (Grade 1 and 2), with a minor negative effect.	- ?
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	Within the area there are numerous local and national biodiversity designated sites, as well as areas of Priority Habitat. Development could result in the loss or fragmentation of Priority Habitat, or increase pressures on designated sites with negative effects on biodiversity. However, there is Policy mitigation (Nature Conservation, Enhancing Ecological Networks) which will ensure biodiversity is protected. Development has the potential to enhance local biodiversity by providing habitat linkages, improving awareness of local biodiversity through studies and education, and using ecologically appropriate landscaping. Potential for a minor positive effect. Potential to provide improvements to the Greensand Ridge Nature Improvement Area and the Marston Vale Community Forest also.	+?

¹⁸² Please note that Flood Risk is considered by the SA within objective number 10

Growth Location: Area D Villages		
Number of Dwellings: up to 2000 homes dispersed through the villages		
13. Landscape Protect and enhance the landscape and townscape	Development within the villages has the potential to affect the rural nature of the landscape, with development potentially being located in areas which have a high landscape sensitivity. Potential for a minor negative effect.	-?
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Throughout the area there are numerous heritage designations, including Conservation Areas, Listed Buildings, Archaeological Notification Areas and Scheduled Monuments. Development could have a negative effect, including on the setting of local heritage. However, mitigation is provided through draft Local Plan policy (Built Heritage) which will protect heritage, and development can be guided away from areas with particular heritage/historic sensitivity, with the potential for a residual neutral effect.	0?
There is some uncertainty remaining at this stage of assessment for many of the SA Objectives as the specific location of smaller development in villages and dispersed throughout the area is not yet known.		

Strategic Employment Growth Location Options tested through SA:

PBA ¹⁸³ Ref Nos	Area A-D	Strategic Employment Growth Location Option	Number of Jobs
	A	Sundon Rail Freight Interchange	2,300
	B	Biggleswade, West of A1	2,000
	C	Ridgmont, M1 Junction 13	1,700

¹⁸³ PBA for Central Bedfordshire Strategic Employment Growth Studies (March 2017)

Growth Location: Sundon Rail Freight Interchange Employment Land/Jobs: up to 2300 new jobs		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	No housing is being proposed as part of this employment growth location. Likely neutral effect.	0
2. Communities To maintain and enhance community and settlement identities	The employment growth option is located within the Green Belt. The Green Belt Study¹⁸⁴ identifies the land as located within Parcel L2, all of which is considered to make a strategic contribution to the purposes of Green Belt. Development therefore has the potential for major long term negative effects. The development of employment land is unlikely to significantly affect the identity of any settlement as it is not located within or directly adjacent to a settlement but rather alongside the railway line, although Sundon village is nearby. Potential for neutral effects on settlement identity.	-- 0
3. Services & Facilities To improve accessibility to services and facilities ¹⁸⁵	Given the scale of the employment growth location option it is likely that sufficient services and facilities can be provided on site to satisfy the needs of the employees on site, without the need to travel offsite. Despite this, the option is in close proximity to the major settlements of Luton, Houghton Regis and Dunstable which offer a wide range of service and facility provisions. Development at the location is unlikely to lead to any significant effects against this SA Objective.	0

¹⁸⁴ LUC for Central Bedfordshire Council Green Belt Study (October, 2016)

¹⁸⁵ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

4. Employment To support the economy and ensure that there are suitable opportunities for employment	The option will deliver new employment land and jobs to support the economy with the potential for major long term positive effects. The location is adjacent to a railway line in close proximity to Harlington and Leagrave railway stations, and also has the potential to create a new railway station to allow for increased access. Potential for major long term cumulative positive effects. The proximity of Luton, Houghton Regis and Dunstable indicate opportunities to support and enhance the vitality and viability of town centres with further positive effects.	++	++
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location option is not in an area of higher deprivation and therefore, no significant effects. The Environmental Framework¹⁸⁶ identifies this area as located within The Chalk Arc, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. Of importance is The Chalk Arc Project¹⁸⁷ that focuses on securing green space in and around proposed housing growth. The growth location is identified in the Chalk Arc Project as Area D – North Luton and Chilterns priority zone. The aim here is to improve public perception of safety at the northern end of Great Bramingham Park and increase the site's biodiversity by improving an area of chalk grassland. Development in this area could also contribute to improving the visual impact of the Friends of Gill Blowers Community Orchard and wildflower meadow. It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects. This is further considered to indirectly positively affect the landscape objectives of the National Character Area 110: Chilterns (see SA Objective 13). There is a SSSI and CWS within the site and there may be potential to enhance these biodiversity sites as part of the overall green infrastructure for people and wildlife (and please see SA Objective No 12 following).	0	++
6. Highways & Air Quality To maintain and improve the existing highway	Development of new employment land may generate increased traffic in this area and early transport modelling¹⁸⁸ identifies that development adjacent to Luton is likely to increase congestion for routes into Luton and other urban roads as well as links to the strategic highway network. Mitigation is provided through draft Local Plan policies Strategic Transport	0?	

¹⁸⁶ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

¹⁸⁷ <http://www.bedscape.org.uk/BRMC/chalkarc/home.htm>

¹⁸⁸ Aecom (2016) for Central Bedfordshire Council. Technical Note Stage 1A Growth Area Analysis

network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles. Potential overall for a residual neutral effect, however there remains an element of uncertainty until site level assessments have been completed. There are 3 AQMAs in Luton ¹⁸⁹ and one in nearby Dunstable. However, the employment growth option is located some distance from these AQMAs such that mitigation measures should be effective with likely neutral effects.	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The employment growth option is located adjacent to a railway line in close proximity to the existing railway stations at Harlington and Legrave. New bus connections to the existing stations serving the site would also support sustainable transport connections with the potential for enhanced positive effects. There is significant potential for the creation of sustainable transport connections and to encourage a modal shift. Its location adjacent to major settlements in the Plan area and just outside the Plan area (Dunstable, Houghton Regis and Luton) also reduces the need to travel for many potential employees.	++
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ¹⁹⁰	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility). It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places), development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	+
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study ¹⁹¹ identifies that this locational option lies within the Upper Lea catchment, located on unconfined chalk geology, in which there are a large number of abstraction licences for groundwater resources, utilised for supporting the public water supply and agricultural uses. There is no surface water available for licensing across this catchment at any flow level as the recent flows are below the requirement to meet a Good Ecological Status. It is identified that no new consumptive licenses for groundwater will be granted in the catchment, and the water	0

¹⁸⁹ <https://uk-air.defra.gov.uk/aqma/maps>

¹⁹⁰ Please note that Flood Risk is considered by the SA within objective number 10

¹⁹¹ JBA for Central Bedfordshire Council (Jan 2017) Water Cycle Study Stage 1

	resources (for both surface and groundwater abstraction) are available less than 30% of the time, indicating pressures on the catchment for resources. It is also recognised¹⁹² that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of employment growth in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. The River Lee through Luton has been classified as poor quality with regard to the EU Water Framework Directive, but this is not near to the employment growth locational option. The option is not within zones 1-2 of any source protection zones and with draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality. Other draft Policies such as on Sustainable Drainage offer possibilities for enhancement through resolving existing problems but uncertain at this stage until more detailed studies.	
10. Flood Risk To reduce the risk of flooding from all sources	The broad growth location option is not in an area at risk of flooding from rivers or the sea¹⁹³. Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, with the potential for some positive effects. Likely residual neutral effects.	0
11. Soil To protect and conserve soil	Development in this broad location option will predominantly result in the loss of greenfield land with the potential for minor long-term negative effects. There is some Grade 2 best and most versatile agricultural land in the south of the growth location and some grade 3 (sub-grade 3a or 3b no known) in the west¹⁹⁴. It is recognised that there remains an element of uncertainty in the agricultural land classification until lower level site assessments have been completed. Given that the location is greenfield land, development is	-?

¹⁹² LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

¹⁹³ Environment Agency (2016) Flood Map for Planning

¹⁹⁴ Central Bedfordshire Council GIS layers (2017)

	unlikely to contain or require remediation for any contaminated land.	
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	There are no internationally designated biodiversity sites in the broad growth location, with no significant negative effects likely. To the north and east of the broad growth location is Sundon Chalk Quarry SSSI, designated for the presence of Fen, Marsh and Swamp Habitat, and for Calcareous Grassland, and is noted as being one of the most important invertebrate sites in the county¹⁹⁵. Fancott Woods and Meadows SSSI is located to the north west of the growth location, and is designated for its Neutral Grassland¹⁹⁶. Both sites are also designated as County Wildlife Sites (CWS). Chalton Scrub & Grassland CWS is adjacent to the employment site in the south¹⁹⁷. There may be possibilities to enhance these sites with positive effects for both wildlife and human health and well-being. Nationally designated Priority Habitat in the employment location is largely located to the north, north west and east, around and within the SSSI and CWS sites. This includes Lowland Fens, Lowland Calcareous Grassland, Deciduous Woodland, and Lowland Meadows Priority Habitat¹⁹⁸. However, the land to the south and west of the growth location is largely clear of Priority Habitat. The employment area is within the South Totternhoe Link Biodiversity Network which also extends to the north, east and west, and the employment area is also within the Upper Lea River Valley Green Infrastructure Network¹⁹⁹. Due to the site option's proximity to a SSSI site, areas of Priority Habitat and CWS sites, there is the potential for minor negative effects. Negative effects could arise from an increase in noise and light pollution, an increase in recreational pressures and an increase in atmospheric pollutants, both during and after the construction phase. This could affect wildlife in the local area, as well as have harmful effects on local habitats. However, it is considered that there is mitigation provided through draft Local Plan policy (Nature Conservation) which seeks to ensure that development does not adversely affect designated sites, and draft Local Plan policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. This mitigation should ensure local biodiversity is not negatively affected by the site option, with a	0

¹⁹⁵ <https://necmsi.esdm.co.uk/PDFsForWeb/Citation/1005586.pdf>

¹⁹⁶ <https://necmsi.esdm.co.uk/PDFsForWeb/Citation/1000520.pdf>

¹⁹⁷ Stratford Council GIS layers (2017) measured using GIS distances from site edge

¹⁹⁸ DEFRA (2017) Magic Map Application

¹⁹⁹ http://www.centralbedfordshire.gov.uk/Images/environmental-framwork-v4_tcm3-14493.pdf

	likely neutral effect. The employment area has the potential to provide enhancements to the local biodiversity. New areas of habitat could be created, and the creation of ecological corridors could be used to link isolated areas of Priority Habitat to the south and east, with benefits for local wildlife movement. There is also the potential to enhance and protect undesignated biodiversity features in the local area, and link them to the South Totternhoe Link biodiversity network. Overall potential for the employment site to have a minor positive effect on biodiversity, through providing ecological enhancements beneficial to local biodiversity.	
13. Landscape Protect and enhance the landscape and townscape	The employment growth location option is in close proximity to the designated AONB landscape. Development at this scale has potential to negatively affect the AONB setting through urbanisation in a previously undeveloped area. However, it is recognised that there is existing development between the location and the AONB providing a buffer to some extent (Upper and Lower Sundon). It is considered therefore that there is the potential for minor long-term negative effects against SA Objective 13 with an element of uncertainty until site level details arise. The option is within the Chilterns National Character Area, and the statements of environmental opportunity identify the need to conserve the Chilterns' groundwater resource and secure sustainable water use (discussed further in SA Objective 9) and to create or enhance green infrastructure in relation to the urban fringe and growth areas such as Luton (discussed in SA Objective 5) to support the objectives of this landscape area.	-?
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	The growth location does not contain any designated heritage assets. To the west of the growth location (approximately 500m away) there are a small number of Listed Buildings in Chalton, on the opposite side of the M1, and to the east (approximately 800m away) there are a small number of Listed Buildings in Lower Sundon²⁰⁰. Although there is some screening present in the form of trees and hedges, mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects. The growth location does not contain any Archaeological Notification Areas. Overall likely neutral effect.	0

²⁰⁰ Stratford Council GIS layers (2017) measured using GIS distances from heritage asset

Growth Location: Biggleswade, West of A1 Employment Land/Jobs: up to 2000 new jobs			
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty		
1. Housing To ensure that the housing needs of all residents and communities are met	No housing is being proposed as part of this employment growth location. Likely neutral effect.		0
2. Communities To maintain and enhance community and settlement identities	The development of employment land is unlikely to significantly affect the identity of Biggleswade. Further employment development to the west of the A1 however could affect the identity of the small hamlet of Holme with the potential for minor negative effects. It is recognised that this could be mitigated through appropriate landscape buffering, and the overall effects remain uncertain until the precise location of development is identified. Potential for overall residual neutral effects on settlement identity. The employment growth option is not located in the Green Belt.		0
			0
3. Services & Facilities To improve accessibility to services and facilities ²⁰¹	Given the scale of the employment growth location option it is likely that sufficient services and facilities can be provided on site to satisfy the needs of the employees on site, without the need to travel offsite. Despite this, the option is in close proximity to the settlement of Biggleswade which offers a wide range of service and facility provisions. Development at the location is unlikely to lead to any significant effects against this SA Objective.		0

²⁰¹ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

4. Employment To support the economy and ensure that there are suitable opportunities for employment	The option will deliver new employment land and jobs to support the economy with the potential for major long term positive effects. The location is adjacent to the settlement of Biggleswade within contains a railway station allowing for increased access. Potential for major long term cumulative positive effects. Also, opportunities for supporting and enhancing the vitality and viability of the town centre with further positive effects.	++	++
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location option is not in an area of higher deprivation and therefore, no significant effects. The Environmental Framework²⁰² identifies this broad locational option as within the Ivel River Valley, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. This will also support the objectives of the Bedfordshire and Cambridgeshire Claylands National Character Area (see SA Objective 13). It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects against SA Objective 5.	0	++
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Though development of new employment land may generate increased traffic in this area and early transport modelling²⁰³ identifies that all new potential growth in this area is likely to have an impact on the A1, cause further congestion and require infrastructure improvements, this is mitigated to a large degree by its location in close proximity to Biggleswade railway station, and potential for sustainable transport connections in this respect. Further mitigation is provided through draft Local Plan policies Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles. Potential overall for a residual neutral effect, however there remains an element of uncertainty until site level assessments have been completed. There is an AQMA in Sandy²⁰⁴. However, the broad area option is located some distance from this such that mitigation measures should be effective with likely neutral effects.	0?	

²⁰² <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

²⁰³ Aecom (2016) for Central Bedfordshire Council. Technical Note Stage 1A Growth Area Analysis

²⁰⁴ <https://uk-air.defra.gov.uk/aqma/maps>

7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The employment growth option is located in close proximity to Biggleswade railway station with the potential for long term positive effects. Development has the potential to extend existing bus services to enhance sustainable transport connections between the site and railway station thus encouraging a modal shift and enhancing the potential positive effects. The location adjacent to a major settlement in the Plan area also reduces the need to travel for many potential employees. However, the location is separated by the A1 and would require infrastructure in the form of a bridge or underpass to access the town and railway station, so uncertainty at this stage.	++?
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change²⁰⁵	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility). It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places), development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	+
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited and tied to a Common End Date (CED) of March 2028. It is also recognised²⁰⁶ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of new employment land in this area is therefore considered to have the potential for	0

²⁰⁵ Please note that Flood Risk is considered by the SA within objective number 10

²⁰⁶ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

	cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades. With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk to the west of the location option²⁰⁷, in line with draft Local Plan policy (Flood Risk Management) it is expected that development could easily avoid these areas with the potential for a residual neutral effect. Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but uncertain at this stage of appraisal. Likely residual neutral effects.	0
11. Soil To protect and conserve soil	Development in this broad location option will predominantly result in the loss of greenfield land with the potential for minor long-term negative effects. Within the broad growth location there is some Grade 1 and Grade 2 best and most versatile agricultural land²⁰⁸. it is recognised that there remains an element of uncertainty in the agricultural land classification until lower level site assessments have been completed. Given that the location is greenfield land, development is unlikely to contain or require remediation for any contaminated land.	-?

²⁰⁷ Environment Agency (2016) Flood Map for Planning

²⁰⁸ Central Bedfordshire Council GIS layers (2017)

12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	There are no internationally designated biodiversity sites in the growth location, with no likely significant effects. Southill Lake and Woods SSSI, designated for the presence of Broadleaved, Mixed and Yew woodland²⁰⁹, is located approximately 5.5km to the west of the growth location²¹⁰. Henlow Common and Langford Meadows Local Nature Reserve (LNR) is approximately 2.5km south west of the growth location²¹¹. The Rivers Ivel and Hiz County Wildlife Site is directly adjacent to Biggleswade²¹². Priority Habitat in the growth location is limited to the small individual blocks of Deciduous Woodland²¹³. The Greensand Ridge Nature Improvement Area (NIA) is located a short distance to the north and west of the growth location. The Ivel Valley Biodiversity Network is located to the west of the growth location, and the growth location is within the Ivel River Valley Green Infrastructure (GI) network²¹⁴. Any areas of Priority Habitat and the CWS and LNR sites in the local area should be protected from development. The use of ecological barriers and buffer zones can achieve this and there is mitigation provided through draft Local Plan policy (Nature Conservation) which seeks to ensure that development does not adversely affect designated sites, and draft Local Plan policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. Any development in the area could provide enhancements to local biodiversity by creating new areas of habitat and enhancing existing areas. Linking individual areas of Priority Habitat, and undesignated areas of habitat, via ecological corridors with the biodiversity network in the area will promote wildlife movement and improve local biodiversity. The NIA, which is situated to the north and west, could be linked with the GI network and biodiversity network, with benefits for local greenspace and wildlife movement. Overall potential for the employment site to have a minor positive effect on biodiversity, through providing ecological enhancements beneficial to local biodiversity.	+
--	--	----------

²⁰⁹ <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1001492>

²¹⁰ DEFRA (2016) Magic Map Application- Measured from the growth locations edge to the designated sites edge

²¹¹ Ibid.

²¹² Central Bedfordshire GIS Layers (2017)

²¹³ DEFRA (2016) Magic Map Application

²¹⁴ http://www.centralbedfordshire.gov.uk/Images/environmental-framwork-v4_tcm3-14493.pdf

13. Landscape Protect and enhance the landscape and townscape	This growth location is not located adjacent to or within the designated AONB landscape. The growth location is within the Bedfordshire and Cambridgeshire Claylands National Character Area, and the statements of environmental opportunity identify the potential to create high quality green infrastructure (identified against SA Objective 5) and landscape regeneration in new development and the need to protect the aquifers and quality of the River Great Ouse (SA Objective 9 outlines the available mitigation for such effects). Development in this broad location is considered overall to support these objectives with the potential for minor long term positive effects against SA Objective 13.	+
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Heritage Assets in the growth location are limited. Biggleswade has a Conservation Area and Listed Buildings, however these are unlikely to be affected by development due to their location 2km north of the growth location²¹⁵, and the residential development located in between. Stratton Park Moated Enclosure Scheduled Monument is a short distance to the east of the growth location²¹⁶, but with existing development located in between, development will not affect the setting of the Scheduled Monument. A Listed Building is in the growth location area, and therefore there is the potential for development to affect the setting of the heritage asset. Mitigation may be required to protect the Listed Building and its setting. Draft Local Plan policy (Built Heritage) should ensure development does not lead to any significant effects. There are several Archaeological Notification Areas in the growth location. Development could investigate and record heritage assets of archaeological significance (according with draft Local Plan Policy Archaeology), resulting in increased archaeological knowledge of the local area, however likely neutral effects with some uncertainty at this stage.	0?

Growth Location: Ridgmont, M1 Junction 13
Employment Land/Jobs: up to 1700 new jobs

²¹⁵ Stratford Council GIS layers (2017) measured using GIS distances from heritage asset

²¹⁶ Stratford Council GIS layers (2017)

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty		
1. Housing To ensure that the housing needs of all residents and communities are met	No housing is being proposed as part of this employment growth location. Likely neutral effect.		0
2. Communities To maintain and enhance community and settlement identities	The development of employment land is unlikely to significantly affect the identity of any settlement provided it is not located immediately adjacent to Brogborough. Potential for neutral effects on settlement identity. Green Belt land is located to the south of the broad employment growth location; however, it is assumed that development would avoid any of the designated land. Potential for neutral effects.		00
3. Services & Facilities To improve accessibility to services and facilities ²¹⁷	Given the scale of the employment growth location option it is likely that sufficient services and facilities can be provided on site to satisfy the needs of the employees on site, without the need to travel offsite. Despite this, the option is in close proximity to the major settlement of Milton Keynes and smaller settlements Woburn Sands and Aspley Guise which offer a wide range of service and facility provisions. Development at the location is unlikely to lead to any significant effects against this SA Objective.		0
4. Employment To support the	The option will deliver new employment land and jobs to support the economy with the potential for major long term positive effects. The location is adjacent to Ridgmont railway station allowing		++?

²¹⁷ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

economy and ensure that there are suitable opportunities for employment	for increased access. Potential for major long term cumulative positive effects but uncertainty of effects regarding opportunities for nearby town centres.		
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The growth location is not in an area of higher deprivation and thus unlikely to lead to any significant effects. The Environmental Framework²¹⁸ identifies this area as located within Marston Vale, a priority corridor of the strategic green infrastructure network. The priority corridor is identified as an area where investment and project delivery can make most impact in securing multi-functional green infrastructure. It is considered therefore that development in this area has the potential to support green infrastructure priorities and have major long-term positive effects against SA Objective 5.	0	++
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Though development of new employment land may generate increased traffic in this area and early transport modelling²¹⁹ identifies that infrastructure improvements would be crucial given the level of stress on the strategic routes in this area, this is mitigated to a large degree by its location alongside the railway line, and potential for sustainable transport connections in this respect. Further mitigation is provided through draft Local Plan Policies Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles. Potential overall for a residual neutral effect, however there remains an element of uncertainty until site level assessments have been completed. There is no designated AQMA in close distance and therefore, no significant effects on air quality from traffic indicated at this stage.	0?	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The employment growth option is located adjacent to a railway line and Ridgmont railway station. There is significant potential for the creation of sustainable transport connections and to encourage a modal shift with long term positive effects.		++

²¹⁸ <http://www.centralbedfordshire.gov.uk/environment/natural/environmental-framework.aspx>

²¹⁹ Aecom (2016) for Central Bedfordshire Council. Technical Note Stage 1A Growth Area Analysis

8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change²²⁰	Given the potential sustainable transport connections identified against SA Objective 7 it is anticipated that development in this growth location can support a continued reduction in GHG emissions, this is further supported by draft Local Plan policy (Connectivity and Accessibility). It is further anticipated that through compliance with draft Local Plan policy (Successful and Sustainable Places), development could achieve policy targets for energy efficiency, high quality design standards that ensure resilience to the effects of climate change and offer potential opportunities for renewable energy production. Potential for a long term minor positive effect but some uncertainty at this stage.	+
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The Water Cycle Study identifies that this location lies within the Upper Bedford and Ouse catchment, where the main pressure on water resources is the abstraction of water for public supply. Abstraction for consumption is only available for up to 32% of the time and 25% of licenses in the area are time limited and tied to a Common End Date (CED) of March 2028. It is also recognised²²¹ that one of the most likely effects of climate change to impact upon Central Bedfordshire will be a shortage of water resources. The Ruthamford South Water Resource Zone (WRZ) is predicted to be in supply-demand deficit by 2026/27 as a result of growth and reduced yield. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements have to be aligned with Water Resources Management Plans. The addition of new employment land in this area is therefore considered to have the potential for cumulative effects on water resources but uncertainty until the scale & location is identified and the Water Cycle Study Phase 2 is undertaken. Rivers in the vicinity of the growth location are considered to be in a moderate overall water body class. The majority of watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The Water Cycle Study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in	0

²²⁰ Please note that Flood Risk is considered by the SA within objective number 10

²²¹ LDA Design (2012) Central Bedfordshire Climate Change Adaptation Evidence Base Final Report

	some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades. With draft Local Plan Policies on Climate Change & Sustainability, Water Quality and Pollution, strong mitigation measures are in place to ensure at least neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	
10. Flood Risk To reduce the risk of flooding from all sources	Though there are areas of flood risk within the location option²²², particularly adjacent to the motorway, in line with draft Local Plan policy (Flood Risk Management) it is expected that development could avoid these areas with the potential for a residual neutral effect. Draft Local Plan policy (Successful and Sustainable Places) requires development to maximise opportunities for Sustainable Drainage Systems, where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects but uncertain at this stage of appraisal. Likely residual neutral effects.	0
11. Soil To protect and conserve soil	Development in this broad location option will predominantly result in the loss of greenfield land with the potential for minor long-term negative effects. Some Grade 3 best and most versatile agricultural land (sub-grade 3a or 3b is not known)²²³ has been identified within the broad location at this stage²²⁴; however, it is recognised that there remains an element of uncertainty in the agricultural land classification until lower level site assessments have been completed. Given that the location is greenfield land, development is unlikely to contain or require remediation for any contaminated land, however as it is in close proximity to the motorway and potentially subject to contaminated water runoff this remains uncertain at this stage until lower level assessments have been completed and the precise location is determined.	-?
12. Biodiversity & Geodiversity To protect, enhance and	There are no internationally designated biodiversity sites in the broad growth location, and no SSSIs, with no significant negative effects likely.	+

²²² Environment Agency (2016) Flood Map for Planning

²²³ Central Bedfordshire Council GIS layers (2017)

²²⁴ DEFRA (2016) Magic Map Application

manage biodiversity & geodiversity	Priority Habitat in the broad growth location includes some Lowland Meadows and Deciduous Woodland Priority Habitat to the north, and smaller individual blocks of Deciduous Woodland in the surrounding land²²⁵. Boughton End Grasslands County Wildlife Site (CWS) is north of the employment growth location²²⁶. To The south and west there are no designated biodiversity sites. The Greensand Ridge Nature Improvement Area (NIA) is a short distance to the east and south of the growth location. There are several Biodiversity Networks in the area, including the Greensand Scarp Slope to the north and the Milton Keynes Corridor to the south. The growth location is also within the Bedford to Milton Keynes (Marston Vale) Green Infrastructure (GI) Network²²⁷. The area does not have a high number of biodiversity assets. However, development may have an effect on the local Priority Habitat and CWS through increased recreational use and loss or fragmentation of key habitat. Ecological buffers could be implemented to protect local biodiversity and Priority Habitats, and there is mitigation provided through draft Local Plan policy (Nature Conservation) which seeks to ensure that development does not adversely affect designated sites, and draft Local Plan policy (Enhancing Ecological Networks) further seeks to ensure that development positively contributes to biodiversity. There are a range of opportunities for development at the growth location to provide benefits for local biodiversity. The growth location is within the planned route for the Milton Keynes to Bedford Waterway, which will provide a range of biodiversity benefits for the local area by creating new green and blue corridors and creating new areas of habitat²²⁸. The growth location is also within the Forest of Marston Vale²²⁹, an environmental regeneration project covering 61 square miles between Milton Keynes and Bedford. Development could link existing habitat areas in the growth location with the local biodiversity networks, the NIA and the proposed Waterway area. This would provide major benefits for the local biodiversity network, and ecological benefits for the NIA and waterway network. There is also the opportunity to create ecological corridors linking undesignated habitats with the biodiversity networks. Overall potential for the employment site to have a minor positive effect on biodiversity, through providing ecological enhancements beneficial to local biodiversity.	
---	---	--

²²⁵ DEFRA (2017) Magic Map Application

²²⁶ Ibid.

²²⁷ http://www.centralbedfordshire.gov.uk/Images/environmental-framework-v4_tcm3-14493.pdf

²²⁸ <http://www.b-mkwaterway.org.uk/vision/>

²²⁹ <http://marstonvale.org/>

13. Landscape Protect and enhance the landscape and townscape	This employment growth location is not located adjacent to or within the designated AONB landscape. The broad location is within the Bedfordshire and Cambridgeshire Claylands National Character Area, and the statements of environmental opportunity identify the potential to create high quality green infrastructure (identified against SA Objective 5) and landscape regeneration in new development and the need to protect the aquifers and quality of the River Great Ouse. Development in this broad location is considered overall to support these objectives with the potential for minor long term positive effects against SA Objective 13.	+
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	There are limited heritage assets in the growth location area. The nearest Conservation Areas and Listed Buildings to the south of the junction are approximately 1km away²³⁰. To the north there are 2 Listed Buildings on either side of the motorway junction, and located approximately 200m north of the motorway²³¹. Approximately 1.5km north of the motorway there is also a Scheduled Monument²³². Development at the growth location may have an effect on the setting of the heritage assets, and therefore mitigation measures may be required. Mitigation is provided through draft Local Plan policy (Built Heritage) which should ensure development does not lead to any significant effects. There are several, small Archaeological Notification Areas in the growth location. Development could investigate and record heritage assets of archaeological significance (according with draft Local Plan Policy Archaeology), resulting in increased archaeological knowledge of the local area, however likely neutral effects with some uncertainty at this stage.	0?

²³⁰ Central Bedfordshire Council GIS Map Layers-Measured form the motorway to the heritage asset

²³¹ Ibid.

²³² Ibid.

Appendix VI: SA of Strategic Policies

Key:

Categories of Significance		
Symbol	Meaning	Sustainability Effect
++	Major Positive	Proposed development encouraged as would resolve existing sustainability problem
+	Minor Positive	No sustainability constraints and proposed development acceptable
0	Neutral	Neutral effect
?	Uncertain	Uncertain or Unknown Effects
-	Minor Negative	Potential sustainability issues: mitigation and/or negotiation possible
--	Major Negative	Problematical and improbable because of known sustainability issues; mitigation likely to be difficult and/or expensive
-	+	SA Objectives 2, 4, 5, 9 & 11 consider more than one sub-topic such that more than more than one significant effect may be predicted with two symbols.
		No 2 Communities – first symbol refers to in/out of Green Belt; second symbol refers to community & settlement identities No 4 Employment – first symbol refers to employment support; second symbol refers to vitality/viability of town centres No 5 Health & Equality – first symbol refers to regeneration/deprivation & equality; second symbol refers to Green Infrastructure for health & well-being No 9 Water – first symbol refers to water resources; second symbol relates to water quality No 11 Soil & Land – first symbol refers to greenfield & agricultural land qualities; second symbol relates previously developed land

Summary Strategic Sustainability Appraisal

Draft Central Bedfordshire Local Plan Strategic Approach & Policies	Sustainability Objective																	
	Housing	Communities		Services & Facilities	Employment		Health & Equality		Highways & Air Quality	Sustainable Transport	Energy & Climate Change	Water Resources & Quality	Flood Risk	Soil & Land		Biodiversity & Geodiversity	Landscape	Histroic Environment
	1	2		3	4		5		6	7	8	9	10	11		12	13	14
Growth Strategy (SP1)	++	-?	?	+++?	++	++	++	++	-?	+	0	0?	0	--	-?	++	-	0?
NPPF – Presumption in Favour of Sustainable Development (SP2)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Approach to Master Planning for Strategic Growth Locations	++	-?	+	++	+	+	0	++?	++?	+	++?	+	0	0	0	+	++?	0
Gypsy & Traveller, and Travelling Showpeople Pitch Requirement (SP7)	++	+	?	0?	0	?	++	?	0	?	?	0	?	-	0	0?	0?	0?
Development in the Green Belt (SP3)	-	++	+	0	-	++?	-	+	++	+	+	0	+	+	++	++	++	+

Coalescence (SP4)	-?	+	++	0	0	+	+	+	0?	0?	0	0	+	+	+	+	+	+
Important Countryside Gaps (SP5)	-	+	+	0	0	+	+	+	0	0	0	0?	+	+	+	+	+	+
Development within Settlement Envelopes (SP6)	+	++	++	++	++	++	+	+	+	+	0	+	+	+	+	+	+	+
Settlement Hierarchy	++	++	++	++	++	++	+	+	+	+	+	+	+	+	+	+	+	+

Strategic Policy: Growth Strategy

A minimum of 20,000 new homes will be delivered and a minimum of 24,000 new jobs between 2015 and 2035 (23,000 homes are existing commitments). The Council will also continue to support the delivery of the existing committed sites.

In addition to the existing committed sites, development will also be brought forward through Neighbourhood Plans, and through **medium and small scale sites** in Areas B, C & D that will be set out in the pre-submission version of the plan.

In addition to the existing committed sites, new development will be planned for **at a selection** of the following locations:

Area A

- North of Luton (Town Extension)
- West of Luton (Town Extension)
- Inset Green Belt Villages (Village Extensions)
- M1 Junction 11a – Strategic Employment Area

Area B

- Tempsford New Settlement (New Market Town)
- East of Biggleswade (New Villages)
- East of Arlesey (Town Extension)
- A1 (Junction 11) – Strategic Employment Area

Area C

- Marston Vale New Settlement (New Villages)
- Aspley Guise (North of Railway Line) (New Villages)
- Wixams Southern Extension (Town Extension)
- M1 Junction 13 – Strategic Employment Area

Area D

- RAF Henlow (Mixed Use Employment)

In addition to these strategic growth locations, development will also be brought forward through Neighbourhood Plans, and through medium and small scale sites that will be set out in the pre-submission version of the plan. Planning applications for piecemeal development that prejudices the delivery of growth locations set out in this policy will be refused.

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and	The policy seeks to deliver enough housing to meet the needs of all residents and communities, dispersed appropriately across the whole of the Plan area with the potential for major long term positive effects that will be synergistic and cumulative.	++

communities are met	Supported by Policy H1 Housing Mix which ensures an appropriate mix of housing types, tenures and sizes, and Policies on Standards (H2), Older People (H3), Affordable Homes (H4) – helping to ensure that the objective of housing for all is implemented positively.		
2. Communities¹ To maintain and enhance community and settlement identities	The policy identifies growth that will extend a number of settlements in the Plan area. It is assumed that this growth will be appropriately located around the settlements to avoid or minimise any potential coalescence, and negative effects on settlement identities. The SA of strategic Growth Locations has identified where these negative effects may occur and potential mitigation measures that may be applied. At this stage the effects remain uncertain until precise locations have been determined. Mitigation is also provided through draft Strategic Policy Coalescence & this should help reduce negative effects for integration and identity objectives. The policy identifies that a proportion of the planned growth will be developed within the Green Belt with the potential for major long term negative effects. It is assumed that this development will be guided by the Green Belt study which has identified areas of land that make weaker contributions to Green Belt purposes to reduce the extent of the identified effects where possible. Mitigation measures have also been integrated by proposing major development to the north and west of Luton, adjacent to the existing urban form – and this reduces the significance of the negative effects. There remains an element of uncertainty until precise location details emerge and further locationally specific studies are completed for the next stage of plan-making.	-?	?
3. Services & Facilities To improve accessibility to services and facilities ²	The policy identifies the overall level of growth and strategic locations to deliver this growth. The policy does not identify measures to improve accessibility at these locations. The SA of strategic growth locations has identified where positive and negative effects may occur and potential enhancements or mitigation measures at each location. This is supported by Policy T1 Connectivity and Accessibility. New development across the Plan area, particularly large scale developments, is likely to deliver new service and facility provisions and increase accessibility in this respect with long term major positive effects. Until the precise locations are determined, there remains an element of uncertainty.	++?	

¹ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

² This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

4. Employment To support the economy and ensure that there are suitable opportunities for employment	The policy seeks to deliver 24,000 new jobs to support economic growth in line with housing and population growth with the potential for major long term positive effects. This will support increased accessibility for both new and existing residents, particularly given the proposed locations in close proximity to railway station connections, and can support the retention of workers within the Plan area to help resolve the identified out-commuting sustainability problem. The intention to consider medium and small scale sites could offer opportunities to support and enhance the vitality and viability of town centres depending upon location -to be investigated at the next stage of plan-making and SA.	++	++
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The delivery of new housing, particularly in areas in the south such as around Luton and Houghton Regis and Caddington, will support regeneration in areas of high deprivation with the potential for major long term positive effects. The SA of strategic growth locations has identified which locations are most likely to lead to these positive effects. New development across the Plan area, particularly large scale developments, is likely to deliver new Green Infrastructure and support ecological connectivity with the potential for major long term positive effects. The delivery of these positive effects is supported by draft DM Policies Green Infrastructure and Enhancing Ecological Networks. The SA of strategic growth locations has identified that some of these locations are within priority GI corridors where investment and project delivery can make most impact in securing multi-functional green infrastructure and long term positive enhancements – for both biodiversity & human health/well-being.	++	++
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	The delivery of significant levels of growth as identified in the growth strategy policy is likely to negatively affect the existing highways network and require significant infrastructure investment. Increased traffic is likely to simultaneously negatively affect air quality in the Plan area, and this has potential for greater negative effects in and around areas with a designated AQMA (Luton, Dunstable, Sandy and Ampthill), i.e. growth locations north of Luton, west of Luton, Flitwick and Tempsford. Large scale development schemes are likely to deliver the necessary infrastructure requirements to accommodate the growth and mitigation is provided through draft DM Policies Strategic Transport Improvements, Mitigation of Transport Impacts on the Network, Connectivity and Accessibility, Development and Public Transport Interchanges and Low Emission Vehicles, which	-?	

	should ensure that there will be no significant effects. Potential for a residual minor long term negative effect and at this stage there remains an element of uncertainty.	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The policy identifies the overall level of growth and strategic locations to deliver this growth. The policy does not identify measures to improve accessibility at these locations. The SA of strategic growth locations has identified where positive and negative effects may occur and potential enhancements or mitigation measures at each location. This is supported by draft DM Policy Connectivity and Accessibility. New development across the Plan area, particularly large scale developments, is likely to support the delivery of major transport improvement schemes, for example, including the East-West Rail. Most of the identified growth locations are in areas that can improve access to existing and proposed railway connections, and largely extend settlements where public transport services are viable. New development in these areas can further support public transport service improvements through development gains / contributions. The scale and scope of new major developments, especially new settlements, can facilitate new and improved sustainable transport networks with positive effects. Overall likely long term positive effects.	+
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ³	The policy identifies the overall level of growth and strategic locations to deliver this growth. The policy does not identify measures to maximise the potential for energy efficiency or minimise the effects of climate change and as such is unlikely to lead to any significant effects. The strategic policy is however supported by draft core policies Successful and Sustainable Places and Climate Change and Sustainability which seek to ensure that new development positively contributes towards this SA Objective. Large scale development schemes have the greatest potential to deliver positive effects for energy & climate change, and it is noted in the SA of the strategic policy Master Planning for Strategic Growth Locations that policy could be strengthened to maximise these opportunities and support ambitious targets for new large scale projects e.g. carbon neutral development.	0

³ Please note that Flood Risk is considered by the SA within objective number 10

9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The policy proposes high levels of growth that is likely to significantly increase the demand for water resources in a largely water stressed Plan area. The SA of strategic growth locations identifies the catchment and water resource zone details for the individual locations and the constraints and opportunities for each of these areas. The Water Cycle Strategy identifies that most watercourses in the Plan area are not currently meeting 'good' classification and the most common reason for this is 'pollution from waste water'. The study identifies that all WwTWs have some capacity within their existing quality permits to accommodate future development without causing a class of 10% deterioration, however in some settlements the available capacity is quite small, and in some cases development may also require WwTW upgrades. There are no strategic limitations on development growth as Water Companies have a statutory duty to supply water; however, capacity for providing additional supply varies & any new infrastructure requirements will have to be aligned with Water Resources Management Plans. The additional growth is therefore considered to have the potential for cumulative effects on water resources and water quality but there is uncertainty until the Water Cycle Study Phase 2 is undertaken. Policies on Climate Change & Sustainability (CC1), Water Quality (CC6) and Pollution (CC7) provide strong mitigation measures to ensure at least residual neutral effects on water quality, and ensure that development supports local WRMPs with high water efficiency targets.	0?
10. Flood Risk To reduce the risk of flooding from all sources	There are areas of flood risk across the Plan area, and the SA of strategic growth locations have identified these and potential mitigation measures at each of the locations. It is assumed that development would largely avoid areas of flood risk within the locations and mitigation is provided through supporting Policy CC3 Flood Risk Management. Policy CC5 Sustainable Drainage also seeks to maximise Sustainable Drainage Systems opportunities where applicable, and there may be possibilities for enhanced effects to help resolve existing flooding problems with the potential for some positive effects. At this stage of assessment however neutral effects are considered most likely.	0

11. Soil & Land To protect and conserve soil	The level of growth identified across the growth locations will inevitably lead to loss of greenfield land with the potential for major long term cumulative negative effects against this SA Objective. The SA of strategic growth locations has identified where there is best and most versatile agricultural land at each of these locations and whether the loss of this can be avoided. A significant area of best and most versatile agricultural land is identified with the Marston Vale, Biggleswade and Arlesey locations and it is noted as unlikely that development will be able to avoid the loss of this with the potential for permanent negative effects on soils in this area of the Borough. Other strategic locations also include some higher quality agricultural land and avoidance/minimisation of loss may be possible through creative masterplanning – some uncertainty at this stage of assessment until further detailed studies completed for the next draft Plan.	--	-?
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	New development across the Plan area, particularly large scale developments, is likely to deliver new Green Infrastructure and support biodiversity and ecological connectivity with the potential for major long term positive effects. Development is likely to be appropriately located to avoid the loss of any designated biodiversity & geodiversity. Mitigation of potential negative effects and the delivery of positive effects is supported by Policies EE1 Green Infrastructure, EE2 Enhancing Biodiversity, EE3 Nature Conservation and EE4 Trees, woodlands and hedgerows. The SA of strategic growth locations has identified that some of these locations are within priority GI corridors where investment and project delivery can make most impact in securing multi-functional green infrastructure and long term positive biodiversity enhancements. Some uncertainty at this stage of assessment until further detailed studies completed for the next draft Plan.	++?	
13. Landscape Protect and enhance the landscape and townscape	The level of growth identified across the growth locations will inevitably change the landscape and character of these areas to some degree with the potential for long term cumulative negative effects. These effects are likely to be most significant in areas of high landscape sensitivity such as in Area A in the south of the Plan area around the Chilterns AONB. Mitigation is provided through supporting Policies EE4 Trees, Woodlands and Hedgerows, EE5 Landscape Character and Value, EE6 Tranquillity, EE7 The Chilterns Area of Outstanding Natural Beauty, EE8 The Greensand Ridge Nature Improvement Area, and EE9 Forest of Marston Vale, which should ensure that development is sensitively designed and does not lead to any significant negative effects.	-	

	However, the additional of new development in previously undeveloped areas is likely to cumulatively lead to minor long term negative effects.	
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	The SA of strategic growth locations has identified the potential for both positive and negative effects at each of the locations, as well as potential mitigation and enhancement measures. It is assumed that development at any of the locations will avoid the loss of designated heritage assets, and mitigation is provided through supporting Policies HE1 Archaeology and HE3 Built Heritage to ensure that development does not significantly affect any heritage assets or their settings. Successful design also has the potential to positively affect heritage settings in the long term, particularly through public realm improvements and improvements to access and signage. However, these effects are largely dependent upon site level details and are thus uncertain at this stage. Potential for overall residual neutral effects at this stage of assessment.	0?
	Summary of Key Negative & Positive Effects for Sustainable Development: The provision for new homes & jobs designed within large scale development, supported by the other Strategic & DM Policies, is likely to lead to major positive effects against SA Objectives, including housing, communities, employment, health, and biodiversity/geodiversity. The strategic Growth Locations are identified and it is explained in the supporting text that the potential quanta of development reflect the full capacity of the locational areas. For those strategic sites that require enabling infrastructure to come forward, it is unlikely that they will be completely built within the lifetime of the Local Plan – and this confirms mitigation measures. Large scale development, and especially new settlements, has the scale and scope to deliver community and green infrastructure, sustainable transport, energy & climate change – with positive effects against these SA objectives that could be major and benefit the wider communities and environment. They also offer scope for creative and/or exemplar design for people and sustainability. The amount of development will have cumulative permanent negative effects for loss of soil/greenfield, and landscape. The Strategic Growth Locations avoid most of the best and most versatile land, thus reducing the negative effects overall to minor. There will be possibilities for mitigating some landscape/visual negative effects when further detailed studies are completed but cumulative effects are likely to remain. There is the potential for negative effects on the highways network & air quality, but these are uncertain until further studies are completed. The additional growth is considered to have the potential for negative effects on water resources and water quality but there is uncertainty until the Water Cycle Study Phase 2 is undertaken; other policies and technical studies should direct & phase the development with potential	

neutral effects but uncertainty remains at this stage of assessment.

It is noted that after more detailed technical work, the next stage of the Plan will include locationally specific key characteristics, provisional capacities for homes & employment, and requirements to confirm implementation of mitigation measures and possibilities for enhancement.

Strategic Policy: National Planning Policy Framework – Presumption in Favour of Sustainable Development

When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework.

Planning applications that accord with the policies in this Local Plan (and, where relevant, with policies in neighbourhood plans) will be approved unless material considerations indicate otherwise.

Where relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise; taking into account whether any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or specific policies in that Framework indicate that development should be restricted.

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty		
1. Housing To ensure that the housing needs of all residents and communities are met	The policy supports sustainable development for minor positive effects on all SA Objectives.	+	
2. Communities⁴ To maintain and enhance community and settlement		+	+

⁴ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

identities		
3. Services & Facilities To improve accessibility to services and facilities ⁵	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
7. Sustainable Transport To encourage a demonstrable modal shift	The policy supports sustainable development for minor positive effects on all SA Objectives.	+

⁵ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

and reduce the need to travel		
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ⁶	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
10. Flood Risk To reduce the risk of flooding from all sources	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
11. Soil To protect and conserve soil	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	The policy supports sustainable development for minor positive effects on all SA Objectives.	+

⁶ Please note that Flood Risk is considered by the SA within objective number 10

13. Landscape Protect and enhance the landscape and townscape	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	The policy supports sustainable development for minor positive effects on all SA Objectives.	+
Summary of Key Negative & Positive Effects for Sustainable Development: This is a standard policy that supports the intention for sustainable development as set out in the National Planning Policy Framework (2012) and therefore, it is likely to have a minor positive effect on all SA Objectives. The SA Framework has identified the sustainability issues & opportunities that are relevant to spatial planning and the Central Bedfordshire Borough area. The possibilities for enhancing the positive effects are dependent upon the other strategic and DM policies that address specific issues for the Plan area.		

Strategic Approach: Master Planning for Strategic Growth Locations

[Please note that this is an approach (rather than a specific strategic policy) that the Council is proposing in the Regulation 18 draft consultation; the SA tested the early drafting of the strategic approach]

It is expected that promoters of strategic sites will sign up to a Planning Performance Agreement with the Council. Development proposals brought forward as a result of a PPA at the identified strategic locations should be accompanied by a comprehensive masterplan for the whole site. The masterplan should include :

- An Indicative Layout;
- Proposals should be based on the creation of a distinctive, well integrated new community which respects its local context, enhances the standards of sustainable design in the locality and relates well to neighbouring settlements.
- A Phasing and Infrastructure plan,
- Proposals should follow an organic sequence of development in accordance with a phasing plan previously agreed with the Council, with the timely provision of infrastructure and community facilities to benefit the new community at the earliest possible time; and
- Details of how this will be delivered and achieved in a timely manner including detailed viability information.

Community Hubs

Proposals should include the provision of a new local centre/hub. This should include:

- retail facilities to meet locally-generated needs;
- small-scale employment uses,
- pre-school facilities, and
- leisure uses and other social infrastructure, including provision, as required, for primary health care to serve the new community.

It is expected that this hub will be centrally located in close proximity to schools and that it is provided early on in the development programme. Further guidance on these requirements will be provided in the next version of the plan.

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and	The approach seeks to guide large scale housing and employment developments to the Growth Areas of: ▪ Marston Vale	++

communities are met	- East of Biggleswade; - North of Luton; - West of Luton; - Arlesey; - South of Wixams; and - Tempsford. The growth would be delivered in accordance with the other policies of the Plan, ensuring that the housing is delivered according to draft DM Policies Housing Mix, Standards, Older People, Starter & Affordable Homes – with overall long term major positive effects.		
2. Communities⁷ To maintain and enhance community and settlement identities	The approach seeks to maximise the benefits arising for communities in large scale development by requiring careful master planning that includes the creation of distinctive, well integrated communities which is likely to lead to minor long term positive effects. The scale of development is likely to result in some development of Green Belt land, which would need to be in accordance with Policies on Green Belt & Coalescence but the potential for minor negative effects; some uncertainty at this stage of assessment.	-?	+
3. Services & Facilities To improve accessibility to services and facilities ⁸	The approach seeks to ensure accessibility to services and facilities through new provisions in large scale development as part of careful master planning. This can support new and existing communities with the potential for major long term positive effects.	++	
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The approach seeks to support large scale development with new employment opportunities with the potential for minor long term positive effects. The delivery of new employment opportunities will also support increased accessibility. Sustainable transport links to existing towns could contribute to opportunities to support and enhance the vitality and viability of town centres, where relevant. It is considered that positive effects could be enhanced through further policy wording that seeks to deliver connectivity to sustainable transport networks which can support new community connections to the wider employment opportunities in and around the Plan area.	+	+

⁷ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

⁸ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The approach does not seek to deliver regeneration in areas of higher deprivation so is unlikely to lead to any significant effects. The approach requires careful master planning and sustainable design in large scale development that is likely to include new green infrastructure (GI) provisions but is not made explicit in a similar way to the community infrastructure. This is supported by Policy EE1 Green Infrastructure but these effects could be more certain if wording was strengthened to include the creation of new GI and ecological connectivity – and perhaps including a comment in the supporting text that explains the value of an ecosystems approach⁹ that benefits both biodiversity and human health/well-being.	0	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	The approach requires careful master planning and sustainable design in large scale development that is likely to include measures to reduce impacts on the highways networks. This is supported by Policies T6 Strategic Transport Improvements, T2 Mitigation of Transport Impacts on the Network, T1 Connectivity and Accessibility, T5 Development and Public Transport Interchanges and T6 Low Emission Vehicles. It is considered that positive effects could be enhanced through further wording that seeks to deliver connectivity and maximises opportunities to support a modal shift.	+	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The approach requires careful master planning and sustainable design in large scale development that is likely to include measures to support a modal shift and increase connectivity to sustainable transport networks. This is supported by T1 Policy Connectivity and Accessibility. It is considered that positive effects could be enhanced through further wording that explicitly identifies these measures.	+	
8. Energy & Climate Change To maximise the potential	The approach requires careful master planning that enhances sustainable design in large scale development. Sustainable design measures are likely to include measures for energy efficiency as well as measures to ensure that development can withstand the effects of climate change. This is	+	

⁹ <http://publications.naturalengland.org.uk/category/38019>

for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ¹⁰	supported by Policy CC1 Climate Change and Sustainability. It is considered however that large scale development locations have the greatest potential of delivering major long term positive effects against this SA Objective, and the Plan could be strengthened to maximise these opportunities and support ambitious or exemplar targets for new large scale projects e.g. carbon neutral development.	
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The approach requires careful master planning that enhances sustainable design in large scale development. Sustainable design measures are likely to include measures for water efficiency as well as measures to ensure that development does not negatively affect water quality. This is supported by Policies CC6 Water Quality and CC1 Climate Change and Sustainability.	+
10. Flood Risk To reduce the risk of flooding from all sources	The strategic growth locations have already been determined through the local plan, and the approach seeks to guide large scale development in these areas, requiring careful master planning and sustainable design. It is assumed that any areas of flood risk can be appropriately avoided and draft DM Policy Flood Risk Management should ensure that development does not lead to any significant effects. Potential for residual neutral effects.	0
11. Soil & Land To protect and conserve soil	The strategic growth locations have already been determined through options investigated for the draft local plan. The policy does not seek to allocate development but rather guide large scale development plans by requiring careful master planning and sustainable design. As such it is unlikely to lead to any significant effects against this SA Objective.	0
12. Biodiversity & Geodiversity To protect, enhance and	The approach requires careful master planning and sustainable design in large scale development that is likely to include biodiversity enhancements and ecological connectivity measures. This is supported by Policies EE3 Nature Conservation and EE2 Enhancing Biodiversity.	+

¹⁰ Please note that Flood Risk is considered by the SA within objective number 10

manage biodiversity & geodiversity	These effects could be more certain if policy wording was strengthened to include the creation of new GI and ecological connectivity; also, supporting text could explain the importance of an ecosystems approach that benefits both biodiversity and human health objectives (and see SA No 2 above).	
13. Landscape Protect and enhance the landscape and townscape	The strategic growth locations have already been determined through options investigated for the Plan. The Plan seeks to guide large scale development by requiring careful master planning and sustainable design, as well as ensuring that development relates well to neighbouring settlements. Supported by strategic policies SP4 Development in the Green Belt and SP5 Important Countryside Gaps as well as policies EE4 Trees, Woodlands and Hedgerows, EE5 Landscape Character and Value, EE6 Tranquillity, EE7 The Chilterns Area of Outstanding Natural Beauty, EE8 Greensand Ridge Nature Improvement Area, and EE9 Forest of Marston Vale, development should not lead to any significant negative effects. The likely inclusion of new GI and public realm enhancements are likely to lead to minor positive effects in the long term; however, there remains an element of uncertainty until site level details and assessments are completed.	+ ?
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	The strategic growth locations have already been determined through options investigated for the plan, and it seeks to guide large scale development in these areas, requiring careful master planning and sustainable design. It is assumed that sensitive and responsive design can ensure that development does not negatively affect any heritage assets that are within the locations or in close proximity. This is supported by Policies HE1 Archaeology and HE3 Built Heritage. Successful design also has the potential to positively affect heritage settings in the long term, particularly through public realm improvements and improvements to access and signage; however, these effects are largely dependent upon site level details and are thus uncertain at this stage. Potential for overall residual neutral effects at this stage of assessment.	0
Summary of Key Negative & Positive Effects for Sustainable Development: The requirement for master planning and sustainable design in large scale developments is likely to lead to minor positive effects against SA Objectives, including housing, communities, employment, health, highways & air quality, sustainable transport, energy & climate change, water resources & quality, biodiversity & geodiversity, and landscapes. Enhanced policy wording which maximises the opportunities for development gains against each of these topics could enhance the identified positive effects. The explicit requirement for enhanced service		

and facility provisions is likely to lead to major long term positive effects.

The strategic growth locations are already determined through the draft Local Plan in other policies with some mitigation measures provided, and as such this approach is unlikely to significantly affect the topics of Development in Green Belt, Equalities, Flood Risk, Soil Quality and the Historic Environment. No potential significant negative effects have been identified because of this strategic approach.

It is noted that after more detailed technical work, the next stage of the Plan will include locationally specific key characteristics, provisional capacities for homes & employment, and requirements to confirm implementation of mitigation measures and possibilities for enhancement.

SA Recommendations:

- The Policy wording could make more explicit the requirements with regard to Green (and Blue) Infrastructure
- Consider including explanation of the ecosystems approach in the supporting text to encourage GI with more positive effects for human health & well-being
- Possible insertion about sustainable travel – positive effects could be enhanced through further wording that explicitly identifies these measures to support a modal shift and increase connectivity to sustainable transport networks

Strategic Policy: Gypsy and Traveller, and Travelling Showpeople Pitch Requirement

Gypsy and Travellers

The Council will facilitate the development of up to 71 pitches to meet the Gypsy and Traveller accommodation need in Central Bedfordshire over the period 2015 - 2035.

The Council will allocate 23 pitches over this period, with 14 of these to be delivered by 2021.

The remaining pitches will be delivered via a criteria-based policy to consider future planning applications for Gypsy and Traveller Sites (see Policy X) in order to deliver up to 48 additional pitches.

Travelling Showpeople

With regards Travelling Showpeople, the Council will facilitate the development of up to 31 plots in Central Bedfordshire over the period 2015 - 2035.

The Council will allocate 21 plots over this period, with 16 of these to be delivered by 2021 to ensure that the Council has an up to date 5 year supply.

The remaining plots will be delivered via a criteria-based policy to consider future planning applications for Gypsy and Traveller / Travelling Showpeople Sites (see Policy GTX) in order to deliver up to 10 additional plots.

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The policy seeks to deliver a proportion of specialist housing (caravans & mobile homes) needs (of Gypsies, Travellers and Travelling Showpeople) and facilitate the delivery of the remaining identified needs with the potential for major long term positive effects for these communities supporting the SA objective to meet the housing needs of all. The allocation of land suitable to meet all the required pitch needs would make major positive effects more certain; however, allowing for planning applications to come forward also provides a degree of flexibility and community choice.	++

2. Communities¹¹ To maintain and enhance community and settlement identities	The policy seeks to deliver specialist housing needs. The allocation of a number of pitches will allow for consultation with communities through the Local Plan process and support effective integration of these allocations with the potential for minor long term positive effects on settlement identities. The allowance for further sites to come forward according with criteria-based policy will help to reduce the likelihood of unauthorised sites emerging that can break down community cohesion and erode settlement identities. It is unclear at this stage whether any of the allocated sites will result in the loss of any designated Green Belt land.	?	+
3. Services & Facilities To improve accessibility to services and facilities ¹²	It is assumed that allocations will be appropriately located to ensure suitable accessibility to existing services and facilities, however without precise location details at this stage it remains uncertain. It is assumed that good accessibility to existing services and facilities will also be one of the criteria in the supporting criteria-based policy guiding future planning applications for pitches, however in the absence of this supporting policy this again remains uncertain at this stage. Mitigation is provided to some extent through T1 Policy Connectivity and Accessibility.	0?	
4. Employment To support the economy and ensure that there are suitable opportunities for employment	The policy does not seek to allocate any new employment land and is unlikely to lead to any significant effects. However, support for travelling showpeople will help promote this way of life including such travelling employment with some positive effects; it may be noted that these pitches will need more space to accommodate vehicles and equipment for travelling show events. It is assumed that the allocated pitches will be appropriately located to ensure suitable accessibility to employment opportunities, however without precise location details at this stage it remains uncertain. It is assumed that good accessibility to employment opportunities will also be one of the criteria in the supporting criteria-based policy guiding future planning applications for pitches; however, in the absence of this supporting policy this again remains uncertain at this stage. Effects on town centres unknown at this stage.	0	?

¹¹ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹² This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The policy does not seek to bring regeneration to areas of higher deprivation and is unlikely to lead to any significant effects. By specifically addressing this ethnic group and their housing needs, major positive effects are indicated by reducing potential inequalities. The policy does not seek to deliver Green Infrastructure gains, and the precise location of allocated pitches is unknown at this stage, the accessibility to areas of green infrastructure therefore remains uncertain at this stage. It is assumed that good accessibility to open / green space will be one of the criteria in the supporting criteria-based policy guiding future planning applications for pitches, however in the absence of this supporting policy this again remains uncertain at this stage. Mitigation is provided to some extent through Policy EE1 Green Infrastructure.	++	?
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Development has the potential to increase traffic and stress on the highway network, and concurrently decrease air quality, however until the precise location of allocations, and the supporting criteria-based policy guidance is determined these effects remain largely uncertain at this time. It is likely that numbers in any one place will not be significant and mitigation is provided through policies T6 Strategic Transport Improvements, T2 Mitigation of Transport Impacts on the Network, T1 Connectivity and Accessibility, T5 Development and Public Transport Interchanges and T7 Low Emission Vehicles to ensure no significant effects. Likely residual neutral effects.	0	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	It is assumed that allocations will be appropriately located to ensure suitable accessibility to existing sustainable transport connections; however, without precise location details at this stage it remains uncertain. It is assumed that good accessibility to existing sustainable transport connections will also be one of the criteria in the supporting criteria-based policy guiding future planning applications for pitches, however in the absence of this supporting policy this again remains uncertain at this stage. Mitigation is provided to some extent through T1 Policy Connectivity and Accessibility.	?	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate	The policy seeks to allocate and guide the future development of pitches that will house mobile housing rather than fixed built development, which is not subject to the design and build standards outlined by core policies. There is a lower likelihood and uncertainty that these sites will therefore maximise the potential for energy efficiency, and be able to withstand the effects of climate change in the housing units themselves. The supporting criteria-based policy should seek to ensure that onsite opportunities for energy efficiency and climate change mitigation and adaptation outside of the housing units themselves is maximised, for example through wind turbines on site, GI and Sustainable Drainage Systems.	?	

change ¹³		
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The allocations and identified requirement for this type of development is likely to lead to a minor increase in the demand for water resources overall in a water stressed Plan area however this is not significant growth and mitigation is provided through draft DM Policy Climate Change and Sustainability. Until the precise location of allocations and criteria-based policy guidance is determined the overall effects on water quality remain uncertain at this stage. Mitigation is provided through Policies CC6 Water Quality and CC7 Pollution which should ensure at least neutral effects.	0
10. Flood Risk To reduce the risk of flooding from all sources	It is assumed that allocations will be appropriately located to avoid all forms of flood risk, however without precise location details at this stage it remains uncertain. It is assumed that the avoidance of this type of development within flood risk areas will also be one of the criteria in the supporting criteria-based policy guiding future planning applications for pitches, particularly given the sensitivity of the proposed use to flood risks, however in the absence of this supporting policy this again remains uncertain at this stage. Mitigation is provided to some extent through CC3 Policy Flood Risk Management.	?
11. Soil & Land To protect and conserve soil	Development has the potential to result in the loss of greenfield land and minor long term negative effects on soils. It is assumed that allocations and policy guidance will seek to avoid the loss of best and most versatile agricultural land; however, this remains uncertain at this stage in the absence of precise allocation location details and the supporting criteria-based policy. Policy DC6 Agricultural Land asserts that development on Grades 1, 2 and 3a agricultural land will not be permitted unless significant sustainability considerations which override the need to protect the land can be demonstrated; and there are no suitable alternative sites which are available for the proposed development – providing strong mitigation and protection for soil quality.	-? 0
12. Biodiversity & Geodiversity To protect, enhance and	It is assumed that allocations will be appropriately located to avoid negative effects on designated and non-designated biodiversity and geodiversity; however, without precise location details at this stage it remains uncertain. It is assumed that the avoidance of this type of	0?

¹³ Please note that Flood Risk is considered by the SA within objective number 10

manage biodiversity & geodiversity	development within designated biodiversity areas will also be one of the criteria in the supporting criteria-based policy guiding future planning applications for pitches; however, in the absence of this supporting policy this again remains uncertain at this stage. Mitigation is provided to some extent through Policies EE3 Nature Conservation and EE2 Enhancing Biodiversity.	
13. Landscape Protect and enhance the landscape and townscape	It is assumed that allocations will be appropriately located to avoid negative effects on designated landscapes and important landscape characteristics; however, without precise location details at this stage it remains uncertain. It is assumed that the avoidance of negative effects on designated landscapes and landscape settings in this type of development will also be one of the criteria in the supporting criteria-based policy guiding future planning applications for pitches, however in the absence of this supporting policy this again remains uncertain at this stage. It is further assumed that these will be small scale developments and therefore, at least likely neutral effects. Mitigation is provided to some extent through Policies SP3 Development in the Green Belt & SP5 Important Countryside Gaps as well as Policies EE4 Trees, Woodlands and Hedgerows, EE5 Landscape Character and Value, EE6 Tranquillity, EE7 The Chilterns Area of Outstanding Natural Beauty, EE8 Greensand Ridge Nature Improvement Area, and EE9 Forest of Marston Vale.	0?
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	It is assumed that allocations will be appropriately located to avoid negative effects on designated and non-designated heritage assets; however, without precise location details at this stage it remains uncertain. It is assumed that the avoidance of negative effects on heritage settings in this type of development will also be one of the criteria in the supporting criteria-based policy guiding future planning applications for pitches, however in the absence of this supporting policy this again remains uncertain at this stage. Mitigation is provided to some extent through Policies HE1 Archaeology and HE3 Built Heritage. It is further assumed that these will be small scale developments and therefore, at least likely neutral effects.	0?
Summary of Key Negative & Positive Effects for Sustainable Development: Until the precise location of allocated sites is identified, and the supporting criteria-based policy guiding planning applications for future pitches is determined the effects against many of the SA Objectives remain uncertain at this stage, particularly in terms of accessibility to services, facilities, transport connections, employment opportunities and open space, as well as in regards to flood risk, green belt development, traffic & air quality, energy & climate change, landscapes, biodiversity and the historic environment. Negative effects through		

loss of the soil resource. DM Policies should reduce potential negative effects to at least neutral.

The policy is likely to result in positive effects for housing and communities by meeting the needs of minority communities, and delivering allocations through the Local Plan process which is subject to consultation with community groups.

Strategic Policy SP3: Development in the Green Belt

The Council will work proactively with developers, and landowners to enhance the beneficial uses of the Green Belt.

Within the Green Belt there is a general presumption against inappropriate development. Inappropriate development proposals within the Green Belt will be assessed in accordance with government guidance contained in the NPPF and NPPG. Planning permission for inappropriate development will only be granted where demonstrable, very special circumstances which outweigh the harm to the Green Belt can be demonstrated. "Very special circumstances" justifying inappropriate development on a site within the Green Belt will be determined by the Council on a case-by-case basis.

Where "very special circumstances" are agreed with the Council, applicants will be required to contribute to improvements to the environmental quality and/or accessibility of surrounding Green Belt land commensurate to the size of the proposal (for example by improving damaged and derelict land, improving access, visual amenity and biodiversity) either directly or via financial contributions.

Replacement of buildings will be permitted provided that the building is in the same use, is not materially larger, and does not have a greater impact on the openness and rural character of the Green Belt than the existing development.

The Council will consider infill development acceptable in principle within 'inset settlements'. Particular attention will be paid to assessing the quality of development proposed and the likely impact on the character of the settlement and its surroundings.

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	Green Belt necessarily presents a constrain to new development in order that its purposes are served. However the Plan identifies the need for some limited release of Green Belt for development, particularly housing, to ensure delivery of sustainable growth. This will be in Growth Area A . The policy provides for development where very special circumstances are met in line with national policy, and Policy SP1 and the Strategic Growth Locations would result in development in the Green Belt . Demonstration and agreement of very special circumstances may have a negative effect on delivery. Review of Green Belt boundaries, particularly identifying areas that make minor contribution to Green Belt functions, would further enable development in sustainable locations.	-

2. Communities¹⁴ To maintain and enhance community and settlement identities	The policy will protect the majority of the Green Belt from development and in doing so help to maintain the integrity of settlements within the Green Belt. The policy provides for infill development within the inset settlements, that will enable provision of additional high quality development to maintain vitality and character of these.	++	+
3. Services & Facilities To improve accessibility to services and facilities ¹⁵	Services would be likely to be provided within settlements and the policy steers development to existing urban areas in Area A. The Strategic Growth Locations proposed within the Green Belt (North of Luton, West of Luton) include provision for associated services and facilities, and Green Belt policy could have a minor negative effect on their delivery. Overall the effects are likely to be neutral.	0	
4. Employment To support the economy and ensure that there are suitable opportunities for employment	Green Belt policy could have a negative effect on economic development and more specifically delivery of new employment in the Strategic Growth Areas North and West of Luton, and in other settlements within the Green Belt. However, it may also have a positive effect through focusing economic development into the urban areas within Area A and in doing so contribute to economic development and vitality of town centres such as Dunstable.	-	+?
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	Green Belt policy, through constraining development and focusing it into urban areas, may contribute to regeneration and improved vitality of town centres in Area A. It will also protect open space and green infrastructure, and the policy seeks to improve environmental quality and accessibility to Green Belt in conjunction with Green Belt release and development in the Green Belt, which should result in a net gain in the amount and quality of green infrastructure.	+	++
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	The policy is likely to have minor positive effect on this objective. Generally constraining development outside of settlements and encouraging redevelopment within urban areas (or on the edge of these in the Growth Locations in Area A with associated provision of transport improvements) should help to reduce the need for travel by car and enhance the existing networks with associated benefits for air quality and greenhouse gas emissions.	+	
7. Sustainable Transport To encourage a demonstrable modal shift	The policy is likely to have minor positive effect on this objective. Generally constraining development outside of settlements and encouraging redevelopment within urban areas (or on the edge of these in the Growth Locations in Area A with associated provision of transport	+	

¹⁴ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹⁵ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

and reduce the need to travel	improvements) should help to reduce the need for travel by car and enhance the existing networks.	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ¹⁶	The policy is likely to have a limited and neutral effect on this objective as it is unlikely to affect energy efficiency or resilience to the effects of climate change. NPPF makes it clear that very special circumstances may include wider environmental benefits associated with renewable energy generation, and so provides for flexibility to accommodate appropriate renewable energy installations.	0
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The policy is likely to have a minor positive effect on delivery of the objective regarding water resources, through constraining development generally that would lead to increases in consumption, demand for treatment,	+
10. Flood Risk To reduce the risk of flooding from all sources	The policy is likely to have a minor positive effect on delivery of the objective through providing general constraint on development in Area A that may impinge on flood zones 2 & 3 (of very limited extent in Area A) or increase the area of impermeable surface.	+
11. Soil & Land To protect and conserve soil	The policy is likely to have a major positive effect on delivery of the objective through providing general constraint on development outside of settlements in Area A and so reducing development on greenfield land and consequent risk of loss of best and most versatile agricultural land. This will also steer development (except for Growth Locations) to existing urban areas and previously developed land and sites.	++ ++
12. Biodiversity & Geodiversity	The policy is likely to have a major positive and complementary effect on delivery of the objective through providing general constraint on development outside of settlements in Area A and so reducing development on areas of important existing or potential habitat or geological	++

¹⁶ Please note that Flood Risk is considered by the SA within objective number 10; air quality is discussed against SA Objective 6.

To protect, enhance and manage biodiversity & geodiversity	interest. The policy also seeks enhancement and beneficial uses of Green Belt, which will include for biodiversity.	
13. Landscape Protect and enhance the landscape and townscape	The policy is likely to have a major positive and complementary effect on delivery of the objective through providing general constraint on development outside of settlements in Area A and so reducing development on areas of landscape importance and on the general rural landscape character.	++
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	The policy is likely to have a positive effect on delivery of the objective through providing general constraint on development in Area A that may affect historic or heritage assets and their settings	+
Summary of Key Negative & Positive Effects for Sustainable Development: Overall the policy is likely to have a complementary positive effect on the achievement of the objectives that also seek to protect natural resources including soils, landscape, biodiversity and water through providing general constrain on development in Area A, requiring development to demonstrate very special circumstances. These may be demonstrated in the Growth Areas or through review of Green Belt boundaries, and in these circumstances the policy seeks to achieve enhancements to the quality and accessibility of Green Belt land. Through providing high level constraint on development this could have a negative effect on delivery of new employment land with consequences for economic development.		

Strategic Policy SP4: Coalescence Other than for specific proposals and land allocations in the Local Plan, new development in the countryside must avoid reducing open land that contributes to the form and character of existing settlements. In considering applications for development the Council will have regard to maintaining the individual identity of towns and villages and will resist any extensions to built-up areas that might lead to coalescence between settlements.		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The policy may constrain development in certain locations where this may be leading to coalescence, and so could have a minor negative effect on delivery of housing where this may be in extensions to existing settlements.	- ?
2. Communities¹⁷ To maintain and enhance community and settlement identities	The policy, through constraining development in the countryside, would complement other constraint policies including, in Area A, Green Belt. Its purpose is to preserve the separate identities of neighbouring settlements and communities and so would be expected to have a major positive effect on preserving and enhancing settlement character.	+ ++
3. Services & Facilities To improve accessibility to services and facilities ¹⁸	The policy is likely to have only a neutral effect on this objective as it would not directly affect delivery of or accessibility to services, but may encourage development within settlements where there may be better access to services.	0

¹⁷ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

¹⁸ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

4. Employment To support the economy and ensure that there are suitable opportunities for employment	The policy is likely to have a minor positive effect on this objective as while it may constrain economic development and provision and development of employment land on the edge of settlements it may also serve to concentrate development within settlements with employment opportunities and support enhancement of services in town centres.	0	+
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The policy is likely to steer development towards existing urban areas and so may help in encouraging investment and regeneration within settlements. It will help constrain development in the countryside and so help protect rural green space and green infrastructure	+?	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	The policy is likely to have a neutral effect on this objective. By constraining development on the edge of some settlements it may help to focus development within urban areas, and so avoiding increases in traffic associated with edge-of-town developments and associated emissions.	0?	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The policy is likely to have a neutral effect on this objective. By constraining development on the edge of some settlements it may help to focus development within urban areas, and so avoiding increases in traffic associated with edge-of-town developments.	0?	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate	The policy is unlikely to have an effect on delivery of this objective as it is unlikely to affect energy efficiency, deployment of renewable energy, or resilience to the effects of climate change.	0	

change ¹⁹		
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The policy is unlikely to have an effect on delivery of this objective as it is unlikely to affect water resources or water quality.	0
10. Flood Risk To reduce the risk of flooding from all sources	Through constraining development in the countryside there may be a minor positive effect through reducing development of green field sites and consequent increased area of impermeable surface.	+
11. Soil & Land To protect and conserve soil	Through constraining development in the countryside there may be a minor positive effect through reducing development of green field land and loss of agricultural land. It may also encourage development within urban areas and help encourage development of previously developed land.	+
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	Through constraining development in the countryside there may be a minor positive effect through reducing development of green field land and potential loss of biodiversity and green infrastructure, but on its own would also be unlikely to encourage enhancements or deliver net gain.	+
13. Landscape Protect and enhance the landscape and townscape	Through constraining development in the countryside there may be a minor positive effect through reducing development of green field land and impact on landscape character, but on its own would also not be likely to encourage enhancements.	+

¹⁹ Please note that Flood Risk is considered by the SA within objective number 10; air quality is discussed against SA Objective 6.

14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Through constraining development in the countryside there may be a minor positive effect through reducing potential for development to adversely affect heritage assets and their settings, although through encouraging development within settlements could increase development in proximity to heritage assets within urban areas.	+
Summary of Key Negative & Positive Effects for Sustainable Development: The key aim of the policy is to prevent settlement coalescence and so it will have a major positive effect on settlement identities and characters. Through constraining development in parts of the countryside the policy is likely to have a minor positive effect on protection of countryside and environmental resources and a minor negative effect on delivery of employment land on the edge of settlements. The effects on other objectives are likely to be limited and neutral.		

Strategic Policy SP5: Important Countryside Gaps Important Countryside Gaps will be defined on the proposals map that accompanies the pre-submission version of the Plan. The Council will not grant permission for unallocated development that would promote the visual or physical coalescence of nearby settlements.		
SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The policy will constrain development in the defined Important Countryside Gaps and so could have a minor negative effect on delivery of housing where this may be in extensions to existing settlements.	-
2. Communities²⁰ To maintain and enhance community and settlement identities	The policy, through constraining development in the countryside in the defined Important Countryside Gaps, would complement other constraint policies and help preserve the separate identities of settlements and communities and so would be expected to have a major positive effect on preserving and enhancing settlement character.	+
3. Services & Facilities To improve accessibility to services and facilities ²¹	The policy is likely to have only a neutral effect on this objective as it would not directly affect delivery of or accessibility to services, but may encourage development within settlements where there may be better access to services.	0

²⁰ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

²¹ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

4. Employment To support the economy and ensure that there are suitable opportunities for employment	The policy is likely to have a minor positive effect on this objective as while it may constrain economic development and provision and development of employment land in Important Countryside Gaps it may also serve to concentrate development within settlements with employment opportunities and support enhancement of services in town centres.	0	+
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	The policy is likely to steer development towards existing urban areas and so may help in encouraging investment and regeneration within settlements. It will constrain development in the countryside and so help protect rural green space and green infrastructure	+	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	The policy is likely to have a neutral effect on this objective. By constraining development in Important Countryside Gaps it may help to focus development within urban areas, and so avoiding increases in traffic associated with edge-of-town developments and associated emissions.	0	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	The policy is likely to have a neutral effect on this objective. By constraining development in Important Countryside Gaps it may help to focus development within urban areas, and so avoiding increases in traffic associated with edge-of-town developments.	0	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate	The policy is unlikely to have an effect on delivery of this objective as it is unlikely to affect energy efficiency, deployment of renewable energy, or resilience to the effects of climate change.	0	

change ²²		
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	The policy is unlikely to have an effect on delivery of this objective as it is unlikely to affect water resources or water quality.	0?
10. Flood Risk To reduce the risk of flooding from all sources	Through constraining development in the Important Countryside Gaps there may be a minor positive effect through reducing development of green field sites and consequent increased area of impermeable surface.	+
11. Soil & Land To protect and conserve soil	Through constraining development in the Important Countryside Gaps there may be a minor positive effect through reducing development of green field land and loss of agricultural land. It may also encourage development within urban areas and help encourage development of previously developed land.	+
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	Through constraining development in the Important Countryside Gaps there may be a minor positive effect through reducing development of green field land and potential loss of biodiversity and green infrastructure, but on its own would also be unlikely to encourage enhancements or deliver net gain.	+
13. Landscape Protect and enhance the landscape and townscape	Through constraining development in the Important Countryside Gaps there may be a minor positive effect through reducing development of green field land and impact on landscape character, but on its own would also not be likely to encourage enhancements.	+

²² Please note that Flood Risk is considered by the SA within objective number 10; air quality is discussed against SA Objective 6.

14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Through constraining development in the Important Countryside Gaps there may be a minor positive effect through reducing potential for development to adversely affect heritage assets and their settings, although through encouraging development within settlements could increase development in proximity to heritage assets within urban areas.	+
Summary of Key Negative & Positive Effects for Sustainable Development: The policy will have a major positive effect on settlement identities and characters. Through constraining development in parts of the countryside the policy is likely to have a minor positive effect on protection of countryside and environmental resources and a minor negative effect on delivery of employment land on the edge of settlements. The effects on other objectives are likely to be limited and neutral.		

Strategic Policy: Settlement Hierachy

Major Service Centres

Major service centres provide a focus for employment, shopping and community facilities for the local community and surrounding rural communities.

• Ampthill *	• Biggleswade	• Dunstable *	• Flitwick *
• Houghton Regis *	• Leighton Buzzard *	• Sandy	

Minor Service Centres

Minor service centres are large villages or small towns with a good level of services, possibly including a school, doctor's surgery, a basic retail offer and frequent public transport links.

• Arlesey	• Barton Le Clay *	• Caddington *	• Cranfield
• Harlington **	• Henlow	• Langford	• Lower Stondon
• Potton	• Shefford	• Stotfold	• Toddington *

Large Villages

• Aspley Guise **	• Blunham	• Clophill	• Eaton Bray *
• Fairfield	• Flitton, Greenfield & Wardhedges	• Heath & Reach *	• Hockcliffe *
• Houghton Conquest	• Kensworth **	• Linslade	• Marston Moretaine
• Maulden	• Shillington	• Silsoe	• Slip End *
• Totternhoe	• Upper Caldecote	• Westoning **	• Woburn **

Small Villages

• Aspley Heath **	• Billington	• Brogborough	• Broom
• Campton	• Chalton **	• Clifton	• Dunton
• East Hyde	• Eggington	• Eversholt	• Everton
• Haynes	• Husborne Crawley	• Ickwell	• Lidlington
• Meppershall	• Millbrook	• Milton Bryan	• Moggerhanger
• Northill	• Old Warden	• Pulloxhill	• Ridgmont **
• Salford	• Southill	• Stanbridge **	• Stanford
• Steppingley	• Streatley	• Studham	• Sutton
• Tebworth	• Tempsford (west)	• Tilsworth	• Upper Gravenhurst
• Upper Sundon	• Wharley End	• Whipsnade	• Wingfield
• Wrestlingworth			

Settlements not identified within the hierarchy are, due to their small size and rural character, considered to be part of the countryside. Settlements shaded in **Green** are Green Belt Settlements.

* Settlements that are inset from the Green Belt

** Settlements that are washed over by the Green Belt and have infill only boundaries

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty		
1. Housing To ensure that the housing needs of all residents and communities are met	The policy provides describes and defines the settlement hierarchy to which Policy SP6 applies. In providing the strategic context for the location of development, the hierarchy will ensure that development is appropriate to the settlement type and size, reflecting the capacity studies that have been undertaken that assess constraints on development and opportunities including access to services, availability and capacity of infrastructure. In steering development to settlements that can best accommodate it, the policy will have a major positive effect on housing delivery.	++	
2. Communities²³ To maintain and enhance community and settlement identities		++ ++	
3. Services & Facilities To improve accessibility to services and facilities ²⁴	Through providing for development and enhanced service provision appropriate to settlement type and scale, the policy will contribute positively to achievement of the objective.	++	
4. Employment To support the economy and ensure that there are suitable opportunities for employment		++ ++	

²³ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

²⁴ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	Through providing for development and enhanced service provision appropriate to settlement type and scale, the policy will contribute positively to achievement of the objective by encouraging investment and regeneration in urban areas, constraining development in the countryside and so potential loss of green infrastructure. Policy HQ1 will also apply to developments and ensure health is taken into account.	+	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	All development will generate additional traffic. Through providing for development and enhanced service provision appropriate to settlement type and scale, the policy will contribute positively to achievement of the objective by focusing larger-scale development to major and minor service centres where access to services is likely to through sustainable transport and so reduce increases in traffic. In addition, providing for service provision in smaller settlements may also improve local accessibility. Major and comprehensive development would provide opportunities for highway and public transport enhancement. Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+	
7. Sustainable Transport To encourage a demonstrable modal shift and reduce the need to travel	Through providing for development and enhanced service provision appropriate to settlement type and scale, the policy will contribute positively to achievement of the objective by focusing larger-scale development to major and minor service centres where access to services is likely to through sustainable transport and so reduce increases in traffic. In addition, providing for service provision in smaller settlements may also improve local accessibility. Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ²⁵	The policy is likely to have a minor positive effect as although on its own it does not promote energy efficiency or renewable energy, or improve resilience to climate change, through focusing major development on areas that are best able to accommodate it, and through opportunities for building into development design measures. Policies CC1, CC2, CC3, and CC5 also apply and help ensure that adverse effects are avoided and mitigated.	+?	
9. Water Resources & Quality	Providing for appropriate scales of development in existing settlement envelopes is likely to facilitate connections to existing infrastructure, although there may be local capacity issues in terms of wastewater treatment, but this depends on evidence from the water cycle studies and	+?	

²⁵ Please note that Flood Risk is considered by the SA within objective number 10; air quality is discussed against SA Objective 6.

To minimise the demand for water and maintain or improve water quality	the scale and location of development. Policy CC6 and CC7 would also apply and help ensure that adverse effects are avoided and mitigated.	
10. Flood Risk To reduce the risk of flooding from all sources	Providing for appropriate scales of development in existing settlement envelopes is likely to reduce loss of green field land and encourage redevelopment of previously developed land, which may reduce encroachment into flood risk areas and avoid increasing impermeable areas. However, this is site specific and so the effects are uncertain. Policies CC3 and CC5 would be applied and would help ensure adverse effects would be avoided and mitigated.	+
11. Soil & Land To protect and conserve soil	Providing for appropriate scales of development in existing settlement envelopes is likely to reduce loss of green field land and soils and agricultural land while encouraging redevelopment of previously developed land. Policy DC6 would also apply and help ensure that adverse effects are avoided and mitigated.	+
12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	Providing for appropriate scales of development in existing settlement envelopes is likely to reduce development in the countryside and green field land and thus habitats and green infrastructure. Policies EE1, EE2, EE3 and EE4 and Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+
13. Landscape Protect and enhance the landscape and townscape	Providing for appropriate scales of development in existing settlement envelopes is likely to reduce development of green field land and countryside and would be likely to protect rural landscape character. Policies EE5, EE6, EE7, EE8, EE9 and EE10 Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Providing for appropriate scales of development in settlement envelopes may help to protect heritage assets and their settings in the countryside and at the edge of settlements, but could result in increased pressure on urban heritage assets, although Policies HE1, HE2 and HE3 provide for protection of such assets. Policy HE1, HE2 and HE3 Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+

Summary of Key Negative & Positive Effects for Sustainable Development:

Overall the policy is likely to have a very positive/positive effect on most objectives, as focusing development of an appropriate scale to settlements within the hierarchy will help to ensure that provision is made for housing, employment and services commensurate with the settlement scale, type and function, and capacity. The other policies of the Plan will also apply and provide appropriate control and where necessary ensure that mitigation occurs.

Strategic Policy SP6: Development within Settlement Envelopes

- For the purposes of the Local Plan, settlement envelopes define the boundaries of Settlements defined in the Settlement Hierarchy together with any land allocated for development, with the surrounding countryside.
- Within the Settlement Envelopes and Green Belt infill boundaries of both Major and Minor Service Centres, the Council will approve housing, employment and other settlement related developments (including schemes for community, education, health, sports and recreation uses or mixed community and other uses) proportionate to the scale of the settlement, taking account of its role as a local service centre.
- Within Settlement Envelopes and Green Belt infill boundaries of Large Villages, small-scale housing and employment uses, together with new retail, service, and community facilities to serve the village and its catchment will be permitted.
- Within Settlement Envelopes in Small Villages, development will be limited to infill development, small-scale employment uses, and community facilities.
- Outside the Green Belt only where it can be clearly demonstrated that the proposal would reflect the existing character and grain of the settlement and would not result in a harmful encroachment into the countryside.
- Within 'washed-over' Green Belt settlements permission will be granted for limited infilling and limited affordable housing for local community needs only where it can be demonstrated that development maintains the open character of the village and the openness of the wider Green Belt.
- Where an identified need exists for further community facilities (such as education, health, sports and recreation uses or mixed community and other uses) and there is no land is available within the settlement, a site adjacent to the settlement may be granted planning permission. Such development should make the best use of available land and lead to more sustainable communities.

SA Objective	Assessment of Effects Nature of the likely sustainability effect (including positive/negative, short - medium term (5-10 years)/long term (10 - 20 years plus), permanent/temporary, secondary, cumulative and synergistic); Uncertainty	
1. Housing To ensure that the housing needs of all residents and communities are met	The policy provides for housing to be located within Settlement Envelopes appropriate to the size of the settlement, including providing only for infill development in Green Belt settlements. The policy will be implemented in accordance with Plan's spatial Growth Strategy (SP1) and other policies that focus major development in Growth Locations and existing settlements. As such the policy will have a positive effect on achieving the objective	+

2. Communities²⁶ To maintain and enhance community and settlement identities	Through providing for scales of development appropriate to the settlement type (in the hierarchy) and within settlement envelopes, the policy will help to ensure that the objective is met through maintaining and enhancing services and facilities and preventing coalescence and development in the Green Belt and countryside, thus maintaining settlement character.	++	++
3. Services & Facilities To improve accessibility to services and facilities ²⁷	Through providing for development and enhanced service provision appropriate to settlement type and scale, the policy will contribute positively to achievement of the objective.	++	
4. Employment To support the economy and ensure that there are suitable opportunities for employment	Through providing for development and enhanced service provision appropriate to settlement type and scale and position within the hierarchy, the policy will contribute positively to achievement of the objective.	++	++
5. Health & Equality To improve the health and wellbeing of communities and reduce inequalities	Through providing for development and enhanced service provision appropriate to settlement type and scale, the policy will contribute positively to achievement of the objective by encouraging investment and regeneration in urban areas, constraining development in the countryside and so potential loss of green infrastructure. Policy HQ1 will also apply to developments and ensure health is taken into account.	+	+
6. Highways & Air Quality To maintain and improve the existing highway network and reduce associated indirect impacts on air quality and greenhouse gas emissions	Through providing for development and enhanced service provision appropriate to settlement type and scale, the policy will contribute positively to achievement of the objective by focusing larger-scale development to major and minor service centres where access to services is likely to through sustainable transport and so reduce increases in traffic. In addition, providing for service provision in smaller settlements may also improve local accessibility. Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+	
7. Sustainable Transport To encourage a demonstrable modal shift	Through providing for development and enhanced service provision appropriate to settlement type and scale, the policy will contribute positively to achievement of the objective by focusing larger-scale development to major and minor service centres where access to services is likely to	+	

²⁶ Please note that first symbol relates to location in/out of Green Belt designation; second symbol relates to effects on integration & identity for existing settlements

²⁷ This relates to the provision of services and facilities, such as schools, healthcare centres, shops, and hospitality (café, restaurant, pub).

and reduce the need to travel	through sustainable transport and so reduce increases in traffic. In addition, providing for service provision in smaller settlements may also improve local accessibility. Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	
8. Energy & Climate Change To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities withstand the effects of climate change ²⁸	The policy is likely to have a neutral effect on this objective as on its own it does not promote energy efficiency or renewable energy, or improve resilience to climate change but nor would it hinder these. Policies CC1, CC2, CC3, and CC5 also apply and help ensure that adverse effects are avoided and mitigated.	0
9. Water Resources & Quality To minimise the demand for water and maintain or improve water quality	Providing for appropriate scales of development in existing settlement envelopes is likely to facilitate connections to existing infrastructure, although there may be local capacity issues in terms of wastewater treatment but this depends on the location and scale of development and needs to take account of evidence from the water cycle studies as they become available. Policy CC6 and CC7 would also apply and help ensure that adverse effects are avoided and mitigated.	+
10. Flood Risk To reduce the risk of flooding from all sources	Providing for appropriate scales of development in existing settlement envelopes is likely to reduce loss of green field land and encourage redevelopment of previously developed land, which may reduce encroachment into flood risk areas and avoid increasing impermeable areas. However, this is site specific and so the effects are uncertain. Policies CC3 and CC5 would be applied and would help ensure adverse effects would be avoided and mitigated.	+
11. Soil & Land To protect and conserve soil	Providing for appropriate scales of development in existing settlement envelopes is likely to reduce loss of green field land and soils and agricultural land while encouraging redevelopment of previously developed land. Policy DC6 would also apply and help ensure that adverse effects are avoided and mitigated.	+

²⁸ Please note that Flood Risk is considered by the SA within objective number 10; air quality is discussed against SA Objective 6.

12. Biodiversity & Geodiversity To protect, enhance and manage biodiversity & geodiversity	Providing for appropriate scales of development in existing settlement envelopes is likely to reduce development in the countryside and green field land and thus habitats and green infrastructure. Policies EE1, EE2, EE3 and EE4 Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+
13. Landscape Protect and enhance the landscape and townscape	Providing for appropriate scales of development in existing settlement envelopes is likely to reduce development of green field land and countryside and would be likely to protect rural landscape character. Policies EE5, EE6, EE7, EE8, EE9 and EE10 Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+
14. Historic Environment To ensure the protection and enhancement of heritage assets, the historic environment and its setting	Providing for appropriate scales of development in settlement envelopes may help to protect heritage assets and their settings in the countryside and at the edge of settlements, but could result in increased pressure on urban heritage assets, although Policies HE1, HE2 and HE3 provide for protection of such assets. Policy HE1, HE2 and HE3 Policies T1, T2, T3, T4 and T6 would also apply and help ensure that adverse effects are avoided and mitigated.	+?
Summary of Key Negative & Positive Effects for Sustainable Development: Overall the policy is likely to have a positive effect on most objectives, as focusing development of an appropriate scale within settlement envelopes will help to ensure that provision is made for housing, employment and services commensurate with the settlement scale and type, while conserving the wider countryside and thus reducing pressure on landscape, soils, biodiversity and green infrastructure.		



**CENTRAL BEDFORDSHIRE COUNCIL
LOCAL PLAN**

**EQUALITY AND DIVERSITY IMPACT
ASSESSMENT (EqIA)**

INITIAL SCREENING REPORT

June 2017



EQUALITY AND DIVERSITY IMPACT ASSESSMENT (EqIA) SCREENING REPORT

Central Bedfordshire Local Plan

<i>Date:</i>	March 2017 Draft June 2017 Final	
<i>Prepared for:</i>	Central Bedfordshire Council	
<i>Prepared by:</i>	Owen Jeffreys Barbara Carroll	Enfusion Ltd
<i>Quality assurance:</i>	Barbara Carroll	Enfusion Ltd

enfusion
environmental planning and management for sustainability



Treenwood House
Rowden Lane
Bradford-on-Avon
BA15 2AU
T: 01225 867112
www.enfusion.co.uk

CONTENTS		Page
1.0	Introduction	1
	Background	1
	Consultation	1
	Purpose and Structure of Report	2
2.0	Equality and Diversity Impact Assessment: Equality Act 2010 Requirements	3
3.0	Equality and Diversity Impact Assessment Stage 1: Screening	5
	Approach to EqIA Screening Tasks	
	Task 1: Identify the main purpose and aims of plan	6
	Task 2: Description of other plans, programmes and assessments used to develop the plan	10
	Task 3: Review baseline data and research	10
	Task 4: Screening Assessment - recording the view and the supporting information and analysis	12
	Monitoring	16
4.0	Summary and Conclusions	17
	Appendices	
	I Summary of Key Plans, Programmes and Policies that have influenced the Local Plan	
	II Equality and Diversity Impact Assessment Matrix	

Tables:

- 1 Equality and Diversity Impact Assessment Key Stages
- 2 Plans & Policies used to develop the Draft CB Local Plan

1.0 INTRODUCTION

- 1.1 This Report sets out the process and results of a screening assessment for an Equality and Diversity Impact Assessment (EqIA) of the emerging Central Bedfordshire Council Local Plan (CBLP)¹. The CBLP sets out the spatial Vision, strategic Objectives, Spatial Strategy, strategic and development management Policies for planning and managing development in the Central Bedfordshire area for the period 2015 until 2035.
- 1.2 Enfusion Ltd, independent specialist sustainability and environmental assessors, has been commissioned to carry out the screening on behalf of Central Bedfordshire Council.

Background

- 1.3 The Central Bedfordshire Council is preparing a Local Plan that will establish the strategic direction for the area, focusing on addressing the current and future needs of the area, including the amount and location of development requirements for housing, employment and supporting infrastructure for the period up to 2035. The Council is also considering possibilities for accommodating some of the development needs of adjacent local authorities, in particular Luton Borough Council to the south-east of the Central Bedfordshire area.
- 1.4 The emerging CBLP has been prepared to comply with national planning policy guidance using a range of evidence and taking into account responses made to previous consultations. It is based on collaborative research into the area's characteristics, relationships with adjoining areas, past trends, and future predictions. The draft Local Plan has had regard to the Health & Wellbeing Strategy (2012-2016)², the Community Engagement Strategy (2013-2016)³, and the Central Bedfordshire Equality & Diversity Strategy (2013-2016)⁴.
- 1.5 Under the Equality Act 2010, public authorities such as Central Bedfordshire Council must in the exercise of their functions, have due regard to the need to:
- Eliminate unlawful discrimination, harassment and victimisation and other conduct that is prohibited by or under the Act
 - Advance equality of opportunity between people who share a characteristic and those who do not share a characteristic
 - Foster good relations between people who share a characteristic and those who do not share a characteristic
- 1.6 An EqIA is an assessment tool that seeks to improve the work of the Council and help ensure that it meets with the requirements of the Equality Act 2010.

¹ <http://www.centralbedfordshire.gov.uk/planning/policy/local-plan/overview.aspx>

² http://www.centralbedfordshire.gov.uk/Images/health-wellbeing-strategy_tcm3-15510.pdf

³ <http://www.centralbedfordshire.gov.uk/council/stronger-communities/engagement.aspx>

⁴ http://www.centralbedfordshire.gov.uk/Images/equality-strategy_tcm3-3367.pdf

- 1.7 It is important to note that assessment of equality, diversity, and health/well-being (which is an important aspect of equality) has been detailed through the Sustainability Appraisal (SA) process⁵. All elements of the developing Draft CBLP have been appraised against an SA framework of objectives for sustainable development, including several SA objectives that directly and indirectly address equality, health and diversity: No.1 Housing, No. 2 Community Identity, No.4 Economy & Employment, No.5 Health and Equalities, and Nos. 6 & 7 Transport & Movement. The findings of this EqIA have been integrated into the SA of the Draft CBLP and are also provided as Appendix VIII to the Draft SA Report (June 2017). Health and wellbeing effects are considered in detail in the SA Report.

Consultation

- 1.8 This EqIA Screening Report (June 2017) will be included for consideration alongside the Draft SA Report and the Draft Regulation 18 CBLP for public consultation in summer 2017. Any comments received on the EqIA will be considered during the preparation of the final SA Report.

Purpose and Structure of Report

- 1.9 The purpose of this Screening Report is to determine whether the Draft CBLP is likely to have negative effects on protected characteristics or persons identified under the Equality Act 2010 and whether a full EqIA is required.
- 1.10 This report is structured to demonstrate compliance with the requirements of the Equality Act. Following this introductory section, the Report is organised into three further sections:
- Section 2 - summarises the requirements of the Equality Act 2010 and the purpose of EqIA
 - Section 3 - outlines the screening process and the findings of the screening assessment
 - Section 4 - summarises the findings of the EqIA and sets out the next steps, including consultation arrangements

⁵ <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal>

2.0 Equality and Diversity Impact Assessment: Equality Act 2010 Requirements

- 2.1 The Equality Act (2010) came into effect in October 2010 with the aim of harmonising all extant discrimination law and strengthening the laws that prevent discrimination. The Equality Act applies to the provision of services and public functions and includes the development of Council policies and plans. The Act maintains the protection provided by previous legislation and therefore prevents discrimination on the basis of nine protected characteristics (previously referred to as equality strands): age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; and sexual orientation.
- 2.2 Inequality can exist in a number of forms with regard to land use and spatial development. This can include inadequate provision of, and access to, services (health, food stores, education & recreational facilities), good quality homes, employment opportunities, a healthy living environment and transport infrastructure (safe roads, pavements, public transport, cycle & footpaths) for all members of society.
- 2.3 In summary, public authorities must in the exercise of their functions, have due regard to the need to:
- Eliminate unlawful discrimination, harassment and victimisation and other conduct that is prohibited by or under the Act.
 - Advance equality of opportunity between people who share a characteristic and those who do not share a characteristic.
 - Foster good relations between people who share a characteristic and those who do not share a characteristic.
- 2.4 The Equality Act 2010 does not specify how public authorities should analyse the effects of their existing or new policies in relation to equality, but doing so is an important part of complying with the general duty. The approach in this Report reflects the principles of the Equality Framework for Local Government⁶ as applied across Central Bedfordshire, and other guidance provided by the Department of Health.
- 2.5 An EqIA is a tool that seeks to improve the work of the Council and ensure that the policies and plans developed do not discriminate in the way they provide services and employment, and that where possible they do all they can to advance equality of opportunity between persons who share a relevant protected characteristic, and persons who do not.
- 2.6 The methods and approach used for this assessment involve the following stages - outlined in the following Table 1. This EqIA Report sets out the method and findings for Stage 1 of the assessment - the Screening.

⁶ Equality and Human Rights Commission (2009) Equality Impact Assessment Guidance. Online at <http://www.equalityhumanrights.com/about-us/equality-and-diversity/our-assessments-of-impact/>

Table 1: Equality and Diversity Impact Assessment Key Stages	
Stage 1	
Screening for Equality and Diversity Impact Assessment	- Identify the main purpose and aims of strategy/plan. - Identify other plans, programmes and assessments that have influenced the strategy/ plan in relation to equality. - Provide baseline information on issues and needs related to each protected characteristic or person. - Assess the impacts of the strategy/ plan on the protected characteristics or persons.
	<i>If no negative effects are likely then no further assessment will be required.</i> <i>If there are effects are judged likely or uncertainty exists which cannot be easily mitigated – the precautionary principle applies, proceed to Stage 2</i>
Stage 2	
Full Equality and Diversity Impact Assessment	- Complete additional baseline and research. - Agree scope and method with wider [public] stakeholders as necessary. - Assess strategy/plan in greater detail. - Provide recommendations to mitigate negative impacts. - Develop measures to monitor, evaluate and review (including timescale and mechanisms) the recommendations. - Report outcomes of EqIA and consult with wider [public] stakeholders as necessary. - Finalise EqIA following responses from public and implement.

3.0 Equality and Diversity Impact Assessment Stage 1: Screening

Approach to EqIA Screening: Key Tasks

- 3.1 As detailed previously in Table 1, the EqIA process typically involves two stages. This Report sets out our approach and findings for Stage 1 - to determine whether the Draft CBLP is likely to have any negative effects on protected characteristics or persons identified under the Equality Act 2010 and whether a full EqIA is required.
- 3.2 The process of EqIA Screening can be broken down into four main task areas as outlined in more detail below.

Task 1: Identify the main purpose and aims of strategy/plan. This is where a description of the strategy/ plan will be provided. The following questions will be used to set out the information required for this task. The questions are:

- What are the main aims, objectives, purpose and outcomes of the policy and how does it fit in with the wider aims of the organisation?
- Who implements or delivers the policy, service or function?
- Who will be affected by the strategy/ plan?

Task 2: Description of other plans, programmes and policies used to develop the strategy/plan. This will draw out any relevant documents that have influenced the development of the strategy/ plan in relation to equality.

Task 3: Review baseline data and research. This will involve looking at relevant equalities monitoring data covering the nine protected characteristics or persons from existing databases. Any gaps will be identified.

Task 4: Screening Assessment, recording the view and the supporting information and analysis. This is where the information gained from tasks 1 to 3 is brought together to support the screening view.

The assessment uses a simplified version of the SA/SEA appraisal key⁷ applied across the strategy/ plan, with the assessment informed by decision aiding questions:

- Will the policy have a negative impact on any of the protected characteristics or persons?
- How can identified negative impacts be minimised or removed?
- How can identified positive impacts be improved or enhanced?
- Is monitoring of the issues required?

Assessment Key	
+	Positive Effect/Compatible
-	Negative Effect/Not Compatible
0	Neutral Effect/Not Applicable
?	Unknown or Uncertain Effect

⁷ See also SA Report (March 2017) accompanying the Draft CBLP on public consultation

Task 1: Identify the main purpose and aims of the plan

What are the main aims, objectives, purpose and outcomes of the Plan and how does it fit in with the wider aims of the organisation?

- 3.3 Many of the characteristics⁸ of the area and the issues that are of concern are common throughout Central Bedfordshire and many are national issues, for example:
- An increasing & ageing population
 - Maintaining identity of settlements & communities; meeting diverse needs – Dunstable & Houghton Regis are more culturally diverse
 - Potential loss of Green Infrastructure & need to improve provision of areas of open space & recreation
 - Supporting a modal shift to more sustainable transport – cycling & walking
 - Protecting best & most versatile agricultural land
 - Improving biodiversity resource & ecological networks
 - High quality landscapes
 - Rich heritage assets
- 3.4 Other characteristics are more specific to the area, for example:
- Approximately 50% of residents commute to surrounding areas for work
 - Areas of higher deprivation in the south of area, particularly around boundary with Luton Town
 - Obesity in adults is higher than English average
 - Air quality associated with road traffic exceeds national objectives in Ampthill, Dunstable & Sandy
 - Increased pressures on regional water resources
 - Potential need to accommodate housing growth from outside the plan area
 - Much of west & south of the area is designated as Green Belt
- 3.5 The draft CBC Local Plan⁹ sets out the preferred strategy for accommodating new development within Central Bedfordshire for the period up to 2035. The Local Plan sets out a vision for how the area will develop in the future and the purpose is to make sure that growth happens in a structured way to balance new development with protection and enhancement of communities and environmental assets. It includes a Vision and a number of Strategic Objectives, including those that address social inequality by providing homes & jobs for all and promoting for healthier communities. The Vision and the Strategic Objectives for the Draft CBLP are as follows:

⁸ Final SA Scoping Report (October 2016)

⁹ <http://www.centralbedfordshire.gov.uk/planning/policy/local-plan/overview.aspx>

Central Bedfordshire Local Plan Vision

Central Bedfordshire has taken full advantage of its exceptional strategic position as the central hub of the East-West Oxford to Cambridge growth corridor and its existing strategic north-south routes (M1/A1/East Coast Mainline/Thameslink) to deliver new high tech employment supported by sustainable new homes in a number of new village clusters and market town extensions which are well integrated into the existing high quality landscape. The heritage and distinctiveness of the market towns and villages has been preserved and enhanced by moderate growth ensuring a high quality environment for all residents. The new businesses and population are served by excellent community, transport and communications infrastructure. Multi-service hubs have been delivered to support strong communities and new rail stations at Wixams and Tempsford New Market Town and the Oxford to Cambridge Expressway have ensured excellent connectivity.

CBLP Strategic Objectives (SOs):

SO1 Ensuring sustainable growth and associated infrastructure including the continued regeneration of town and neighbourhood centres to deliver the annual target for new homes and the provision of diverse community hubs.

SO2 Delivering enough homes and jobs to meet our needs. Promote and demand good urban design practices throughout all types and scale of development across Central Bedfordshire.

SO3 Conserve and enhance the area's heritage and settings by ensuring new development, including changes to the public realm, are of high quality design, appropriate to the significance of the heritage asset, and seek to maintain and enhance the contribution of built, landscaped and buried heritage.

SO4 Create high quality neighbourhoods that have regard for local character and use sustainability principles which are sensitive and responsive to the significance of the local environment, are distinctive, safe, functional and accessible and which reinforce the identity of the area's townscapes, landscape and public places.

SO5 Provide a minimum of 24,000 new jobs by 2035, accommodating new economic growth along strategic and sustainable transportation routes, new mixed use developments and existing established sites.

SO6 Recognise the contribution of land for employment uses to meet the needs of different sectors of the economy and manage the release of surplus employment land for other uses where appropriate.

SO7 Link deprived areas with employment benefits arising from the development of major sites and existing key locations

SO8 Address housing needs in Central Bedfordshire using appropriate affordable housing targets and policies to encourage quality and choice.

SO9 Reduce the reliance on the use of the car by improving facilities at bus and train stations, delivering transport interchanges and by promoting safe and sustainable forms of transport, such as improved walking and cycling routes.

SO10 Ensure a reliable network of east/west and north/south public transport routes to improve access to local services and facilities, especially for those without a car, through well planned routes and integrated public transport. Encouraging the shift from road to rail freight to reduce demands on the highway network

SO11 Promote healthier and more active lifestyles by improving the quality of, and accessibility to, the area's open spaces, as areas for sports, recreation, visual interest, biodiversity, education, health and well being.

SO12 Encourage the development of wildlife corridors and networks and provide new open spaces in line with the requirements identified in Central Bedfordshire's Leisure Strategy

SO13 Support the necessary changes to adapt to climate change by minimising emissions of carbon and local air quality pollutants, protecting and enhancing biodiversity. Improving and protecting air and water quality, reducing flood risk and adverse impacts from noise including the safeguarding of quiet areas and reducing the impacts of contaminated land

- 3.6 The draft CBLP is based on research, technical studies and consultation¹⁰ (communities & other key stakeholders) into the Council area's characteristics, relationships with adjoining areas, past trends and future predictions. The most recent research on the development need¹¹ has informed the need for new homes and new jobs over the period 2015 to 2035. New growth of a minimum of 24,000 new homes (around 23,000 homes are existing commitments) and a minimum of 24,000 new jobs has been selected as an appropriate response for the Draft CBLP to address and progress as a preferred strategy for development.
- 3.7 The draft Spatial Strategy sets out the preferred approach for distributing new development through a mix of focusing on existing urban areas and transport corridors. It includes a number of preferred Growth Locations that are broad areas for strategic level development. [It may be noted that potential site options and preferred site allocations for development will be investigated at the next stage of plan-making and subject to public consultation later in 2017.]
- 3.8 The draft CBLP includes policies that set out the strategic approaches and broad locational areas for development. It also includes development management policies that set out the requirements and will guide new development to ensure that the Vision & Strategic Objectives of the Local Plan are met. A list of the policies is provided below:

Strategic Policies

Growth Strategy
Gypsy & Traveller Requirement
Development in the Green Belt
Settlement Envelopes & Hierarchy
Neighbourhood Planning

¹⁰ <http://www.centralbedfordshire.gov.uk/planning/policy/local-plan/shaping-central-beds-consultation.aspx>

¹¹ Central Bedfordshire and Luton Strategic Housing Market Assessment 2015 to 2035 (April 2017)

Development Management (DM) Policies: Infrastructure, Communications & Transport

- Provision for Social & Community Infrastructure
- Indoor Sport & Leisure Facilities
- Strategic Transport Improvements
- Mitigation of Transport Impacts on the Network
- Highway Safety & Design
- Connectivity & Accessibility
- Development close to Public Transport Interchanges
- Low Emission Vehicles
- Management of Freight
- Parking

DM Policies: Housing

- Housing Mix
- Housing Standards
- Supporting Older People
- Affordable Housing
- Rural Exception Sites
- Starter Homes
- Self & Custom Build Housing

DM Policies: Employment

- Employment Sites & Uses
- Change of Use to Non Employment Uses
- Employment Proposals outside Settlement Envelopes
- Rural Economy & Tourism
- Significant Facilities in the Countryside & Green Belt

DM Policies: Town Centres

- Town Centre Uses
- Retail for Minor Service Centres, Villages & the Rural Area
- Town Centre Development
- Fast Food Takeaways

DM Policies: Environmental Enhancement

- Green Infrastructure
- Enhancing Ecological Networks
- Nature Conservation
- Trees, Woodlands, & Hedgerows
- Landscape Character & Value
- Tranquillity
- Chilterns AONB
- Greensand Ridge NIA
- The Forest of Marston Vale
- Bedford & MK Waterway Park
- Public Rights of Way
- Outdoor Sport, Leisure & Open Space
- Local Green Space

Climate Change & Sustainability
Renewable Energy Development
Flood Risk Management
Development close to Watercourses
Sustainable Drainage
Water Quality
Pollution
Applications for Minerals & Waste Development

DM Policies: High Quality Places

Successful & Sustainable Places
Backland Development
Larger Windfall Sites
Small Open Spaces

DM Policies: The Historic Environment

Archaeology
Historic Parks & Gardens
Built Heritage

DM Policies: Development in the Countryside

New Dwellings in the Countryside
Re-Use & Replacement of Buildings in the Countryside
Redundant Sites within the Countryside
Rural Workers Dwellings
Equestrian & Livestock Related Development
Agricultural Land

Who implements or delivers the policy, service or function?

- 3.9 Central Bedfordshire Council is responsible for implementing the CBLP, when finalised and adopted – currently scheduled for 2018. The Draft CBLP will be subject to consultation with statutory and public stakeholders who can influence the Policies in the developing CBLP. Comments received from consultations will be taken into account in the next stage of the plan-making.

Who will be affected by the plan?

- 3.10 The Draft CBLP applies to the administrative area of Central Bedfordshire Council. It will affect everyone who lives, works in and visits the area. The CBLP may also affect those in the adjoining administrative areas, particularly for Luton Borough Council.

Task 2: Description of other plans, programmes and assessments used to develop the plan

- 3.11 Appendix I provides a summary of other relevant plans, policies and assessments that have influenced the drafting of the CBLP in relation to equality and health. They include:

Table 2: Key Plans, Programmes & Policies used to develop the Draft CBLP
National
National Planning Policy Framework (NPPF) (2012)
DCLG, Planning Policy for Traveller Sites (2015)
National Infrastructure Delivery Plan (2016-2021)
Public Health England, Global Health Strategy (2014-2019)
Regional & Central Bedfordshire Area
Central Bedfordshire Health & Wellbeing Strategy 2012-2016 (refreshed April 2015)
Central Bedfordshire Community Engagement Strategy (2013-2016)
Central Bedfordshire Sustainable Communities Strategy (2010-2031)
Central Bedfordshire Local Transport Plan 3 (2011-2016) & Local Area Transport Plans (2011-2026)
Central Bedfordshire Housing Strategy (2012-2016)
Bedfordshire and Luton Strategic Green Infrastructure Plan (2007)
Greensand Trust, Mid-Bedfordshire Green Infrastructure Plan (2008)
Central Bedfordshire Environmental Framework (2016-)
Central Bedfordshire Rent Strategy (2014/15)
Central Bedfordshire Leisure Strategy (2014-2019)
Neighbourhood Plans
Surrounding Area Development Plans
North Hertfordshire District Council Draft Local Plan (2011-2031)
Luton Borough Council, Luton Local Plan (2011-2031)
South Cambridgeshire District Council Local Plan
Bedford Borough Council Local Plan Draft Local Plan
Milton Keynes Council Plan
Dacorum Borough Council Local Plan
St Albans City and District Council Strategic Local Plan (2011-2031)
Mayor of London, The London Plan (2015)
Vale of Aylesbury Local Plan
Assessments
SA/SEAs of emerging & adopted Local Plans

Task 3: Review baseline data and research

- 3.12 The baseline information was sourced from Central Bedfordshire Equality and Diversity Strategy (2013-2016) which is available online at: <http://www.centralbedfordshire.gov.uk/council/equality/diversity.aspx> and the baseline information identified for the health & well-being topics as part of the SA/SEA Scoping process (Final Report, October 2016) and available online

at: <http://www.centralbedfordshire.gov.uk/planning/policy/local-plan/tech-supporting-studies.aspx>.

- 3.13 Given that these statistics have been collated to cover the nine protected characteristics or persons based on the most up-to-date information available under the Equality Act 2010, there are not considered to be any gaps in the data.
- 3.14 The equality and diversity trends in the Central Bedfordshire area from the Central Bedfordshire Equality & Diversity Strategy (2013) may be summarised as follows:
- **Age:** In 2011, 49,800 people in Central Bedfordshire were aged between 0 and 15. A further 164,700 were aged 16-64, with 39,800 aged 65 and over, this figure includes 17,900 people aged 85 and over. The number of people aged 65 and over is expected to increase by about 50% between 2008 and 2021.
 - **Marriage and civil partnerships:** In 2011 52.5% of the Central Bedfordshire population were married and 0.1% had entered into a civil partnership. 29.2% of the population were single, 11.9% were separated / divorced and 6.3% were widowed.
 - **Pregnancy and maternity:** The health and wellbeing of women before, during and after pregnancy is an important factor in giving children a healthy start in life and laying the groundwork for good health and wellbeing in later life. In Central Bedfordshire 90% of pregnant women accessed antenatal services before thirteen weeks of pregnancy. Although teenage pregnancies remain in line with the national average, they are higher than statistical neighbours. Children and young people who are already disadvantaged have an increased risk of teenage pregnancy.
 - **Race:** Central Bedfordshire is ethnically diverse with around 10.3% of people living in the area from black or ethnic minority communities. The biggest ethnic minority groups in Central Bedfordshire were White Other (not White British, White Irish or Gypsy or Irish Traveller), White Irish and Indian. Black Africans account for 0.8% of the population and 0.6% of the population are Chinese. Gypsies and Travellers account for 0.2% of the population which is slightly above the England and Wales average of 0.1%. People of mixed ethnicity make up around 1.9% of residents. The increasing amount of data on migrant workers, unaccompanied asylum seekers and other young people from non-UK backgrounds predicts that immigration in the region will increase.
 - **Religion or belief:** Most of the population state their religion as Christian (62.2%), with (28.4%) having no religion and other religions constituting (2.6%) of the population (Note: 6.8% did not state their religion).

- **Gender reassignment:** The 2011 Census did not include a specific question in respect of gender reassignment. It is estimated from national research that 1 in 10,000 people experience the recognised medical condition known as gender dysphoria, generally referred to as being transgender or transsexual. In any school of 1,000 pupils there are likely to be 6 who will have transgender experience at some point in their lives.
- **Sexual Orientation:** The 2011 Census did not include a specific question in respect of sexual orientation. It is estimated that 'out' gay people living in the United Kingdom form between 6% -10% of the population. This means that in Central Bedfordshire approximately 20, 000 people are likely to openly be lesbian, gay or bisexual, with others feeling unable to disclose such information because they fear the reactions of people around them. The figure for civil partnerships in Central Bedfordshire was 300 in 2011.
- **Sex:** The sex ratios of the Central Bedfordshire population vary according to age. In the younger age groups (ages 0-17) boys represent 51% of the population and girls 49%. In the working age adult groups (ages 18 -64) this ratio reverses with women representing 51% of the population and men 49%. At ages 65+ this trend increases with women representing 54% of the population and men 46%.
- **Disability:** Using the widest definition there are more than 11 million disabled people in the UK, that's more than one in five of the adult population and one in 20 children. 80% of people experience a year of being disabled at some point in their lives and 66% of disabled people develop impairments during working age. The majority of disabled people have impairments that are not easily visible. In the 2011 census findings 15,465 (6.10%) residents in Central Bedfordshire indicated that day-to-day activities were limited a lot and 21,142 (8.30%) residents indicated that day-to-day activities were limited a little.

Task 4: Screening Assessment, recording the view and the supporting information and analysis

- 3.15 The development of the draft CBLP has been influenced by a number of other plans, programmes and assessments relating to the protected characteristics or persons under the Equality Act 2010.
- 3.16 The Vision, Strategic Objectives, Spatial Strategy and Development Management Policies have been assessed to the same level of detail, taking into account the information gathered in Task 3 to establish any potential impacts on the protected characteristics or persons identified under the Equality Act 2010. The screening assessment is presented in Appendix II of this report with summary findings set out as follows:

Vision

- 3.17 The Vision is considered to lead to positive effects on all protected characteristics by promoting a balanced growth policy that supports new development across the Central Bedfordshire area and thus should benefit all through provision of new housing, employment and associated supporting infrastructure, services and facilities.

Strategic Objectives

- 3.18 Most of the Strategic Objectives will have a positive effect on all protected characteristics by guiding development to where it is most needed and in accordance with sustainable development principles. Certain Strategic Objectives will have strongly positive effects, as follows:
- SO1 seeks to ensure sustainable growth, including the continued regeneration of town and neighbourhood centres through the provision of diverse community hubs
 - SO7 seeks to link deprived areas with employment benefits arising from major development sites and existing key locations
 - SO8 addresses housing needs including affordable homes and to encourage quality and choice
 - SO9 & 10 encourage public transport, including safe and improved walking and cycling routes
 - SO11 promotes healthier & more active lifestyles
 - SO13 addresses pollution & risks from climate change effects

Spatial Strategy & Preferred Growth Locations

- 3.19 The Spatial Strategy has been developed to increase the availability of housing and increase employment opportunities mainly in existing urban areas and with some provision for the rural areas. This should benefit all protected groups. The inclusion of a specific Strategic Policy for Gypsy, Travellers, and Travelling Showpeople in the Spatial Strategy will have major positive effects in respect of this ethnic group and the associated race protected characteristics.

Development Management Policies

- 3.20 These Policies seek to ensure that all people (including protected groups) in the Central Bedfordshire area will have a high quality environment in which to live, work, and socialise. The Policies on Housing address the need for new housing development to be of a mix of tenures that should ensure all groups are served with the aim of inclusive, mixed communities. Particular focus has been given to adaptable homes in sustainable locations for older people as this has been identified as a key issue for the area. Affordable housing is required to be integrated with the market housing to promote community cohesion and tenure blindness with positive effects for all protected groups.
- 3.21 Employment and Economy Policies provide new and protect existing employment land; range, flexibility and opportunities for change should support all protected groups. Provision of good quality, adaptable and

affordable housing and employment will also have positive effects for health and well-being. Supporting Infrastructure Policies include requirements for an integrated approach to delivery of new social and community facilities and services with likely positive effects on all groups.

- 3.22 The Transport Policies require that walking, cycling and public transport should be addressed before any consideration of new roads. Policy 6 on Highway Safety includes the specific requirement to consider the access needs of all people with strong positive effects for all protected groups. Policy 7 requires development sites to ensure accessibility by realistic alternatives to the car. Overall, the approach to encourage more sustainable transport should have positive effects on health and well-being, including for all groups.
- 3.23 These Policies on housing, employment and infrastructure are likely to have the greatest positive effects for all groups. Policies relating to high quality places provide further details, for example, Policy 1 on Successful and Sustainable Places requires safe and convenient access, including those with mobility impairments.
- 3.24 Other Policies are also likely to lead to positive effects on the protected characteristics as they aim to protect and enhance the environment in which the protected groups live. This can have benefits in terms of health and cultural well-being for all groups. Of particular importance is the Policy on Green Infrastructure (GI) that recognises the multifunctionality, requiring a high quality and net gain in GI with positive effects for all groups. Also important are the Policies that protect and enhance open spaces, parks and public rights of way with positive effects for all groups with regard to health and well-being. Policies on flood risk management and pollution are also likely to protect all groups. Policies on landscape and the historic environment will contribute to cultural and spiritual well-being.

Site Allocations

- 3.25 This EqlA Report has considered the Regulation 18 Draft CBLP that includes the proposed Vision, Strategic Objectives, Spatial Strategy and Policies with Growth Locations, and Development Management Policies. Comments received through the public consultation in the summer of 2017 will be taken into account in developing the next stage Regulation 19 Draft CBLP and this will include proposed allocations for sites. All reasonable options for site allocations will be subject to SA/SEA which includes objectives and criteria on meeting the needs of all residents and communities, improving health and wellbeing, and reducing inequalities. The site allocations to be developed will be subject to the requirements of the Policies considered in this report and therefore are considered to all lead to positive effects on the protected characteristics. However, there will be particular site specific requirements that are likely to secure further positive effects for all groups. This will be addressed in the revised EqlA Report that will accompany the draft CBLP Regulation 19 on public consultation later in 2017.

Monitoring

- 3.26 The Council is required to prepare a Monitoring Report that includes consideration of equality, health and diversity. The draft CBLP will also include a separate monitoring framework setting out key indicators and contingencies that are critical to ensure the successful delivery of the Plan. These indicators and contingencies are attached to the strategic objectives and policy targets of the Plan and directly and indirectly relate to equality, health and diversity. It will also be reviewed on an annual basis. Therefore, further monitoring regarding equality is not considered to be required.

4.0 Summary and Conclusions

- 4.1 The draft Central Bedfordshire Local Plan details the Council's approach to delivering and accommodating new development within the Central Bedfordshire area for the period 2015-2035.
- 4.2 The development of the draft Central Bedfordshire Local Plan has been influenced by a number of other plans, programmes and assessments relating to the protected characteristics or persons under the Equality Act 2010. This includes the SA process that has tested all the emerging elements of the draft CBLP against a framework of SA Objectives – No 5 specifically relates to equality & health. Furthermore, the draft CBLP includes Strategic Objectives that will strongly promote positive effects for all protected characteristics.
- 4.3 The Vision, Strategic Objectives and Policies, and Development Management (DM) Policies have been assessed to the same level of detail, taking into account the baseline information gathered to establish any potential impacts on the protected characteristics or persons identified under the Equality Act 2010. The assessment found that nearly all the components of the draft plan will lead to positive effects on the protected characteristics; two Development Management Policies were found to be not relevant to the protected groups with neutral effects. No negative effects were identified.
- 4.4 A number of reports are already produced on an annual basis which include consideration of equality, health and diversity within the Central Bedfordshire area. The Draft CBLP will also provide a further monitoring framework that addresses equality, health and diversity through assessing the delivery of the CBLP against its' Strategic Objectives and policy targets. Therefore, further monitoring regarding equality and diversity is not considered to be required.
- 4.5 The assessment has found that the Draft Central Bedfordshire Local Plan is unlikely to have any negative effects on protected characteristics or persons identified under the Equality Act 2010 and thus a full EqIA will not be required.
- 4.6 These findings will be subject to consultation comments from wider stakeholders alongside the representations made on the SA Report (March 2017) and the draft Central Bedfordshire Local Plan Regulation 18 during public consultation during summer 2017. Any comments received will be considered during the preparation of the Pre-Submission Regulation 19 Draft CBLP later in 2017.

Appendix I: Central Bedfordshire Equality and Diversity Impact Assessment - Plans, Programmes and Assessments

Plan/Policy/Programme	Summary and Objectives
National Planning Policy Framework (NPPF) (2012)	The national planning policy framework aims to reform the planning system to make it less complex and more accessible, and to promote sustainable growth. The NPPF streamlines existing Planning Policy Statements, Planning Policy Guidance Notes and circulars to form a single consolidated document which promotes sustainable development. It provides a framework within which local people and authorities can produce local and neighbourhood plans. Local Plans should set out strategic priorities to deliver: ▪ To deliver a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes); ▪ Consider the needs of people with disabilities by all modes of transport.
DCLG, Planning Policy for Traveller Sites, 2015	The Government's overarching aim is to ensure fair and equal treatment for travellers, in a way that facilitates the traditional and nomadic way of life of travellers while respecting the interests of the settled community. Local Plans should: ▪ Make their own assessment of need ▪ Develop fair and effective strategies to meet identified need ▪ that plan-making and decision-taking should aim to reduce the number of unauthorised developments and encampments and make enforcement more effective ▪ to increase the number of traveller sites in appropriate locations with planning permission, to address under provision and maintain an appropriate level of supply ▪ to reduce tensions between settled and traveller communities in plan-making and planning decisions j. to enable provision of suitable accommodation from which travellers can access education, health, welfare and employment infrastructure k. for local planning authorities to have due regard to the protection of local amenity and local environment
Infrastructure and Projects Authority, National Infrastructure Delivery Plan 2016 - 2021	Brings together the Government's plans for economic infrastructure over the next 5 years with those to support delivery of housing and social infrastructure.
Public Health England, Global Health Strategy 2014 to 2019	The paper summarises the government's strategy to protect the population from serious health threat; helping people live longer, healthier and faster and more fulfilling lives; and improving the health of the poorest, fastest. Outlines the cross-government framework that will enable local communities to reduce inequalities and improve health at key stages in people's lives, including:

	empowering local government and communities, which will have new resources, rights and powers to shape their environments and tackle local problems;
NICE Physical Activity: Walking & Cycling (2012)	This guideline covers encouraging people to increase the amount they walk or cycle for travel or recreation purposes.
Natural England (2014) Green Infrastructure Guidance	Guidance articulates NE's position in relation to green infrastructure planning and delivery, which is increasingly recognised as an essential part of sustainable spatial planning. This is due in no small part to the role of green infrastructure as a life support system, able to deliver multiple environmental functions, and to play a key part in adapting to and mitigating climate change.
Central Bedfordshire Health & Wellbeing Strategy 2012-2016 (refreshed April 2015)	A Vision for Central Bedfordshire where everyone can enjoy a health, safe & fulfilling life. 4 principles to inform how the council will work together to improve health & well-being. 4 cross-cutting priorities: ensuring good mental health & wellbeing at every age; giving every child the best start in life; enabling people to stay health for longer; improving outcomes for frail older people.
Central Bedfordshire Council, Local Transport Plan 3, 2011-2026	The Plan sets out a long term framework for investment in transport across Central Bedfordshire. It establishes a strategic approach through which to deal with key transport issues, a series of objectives, and broad areas of intervention through which schemes will be identified and improvements made to the transport network.
Central Bedfordshire Council, Local Area Transport Plans	A total of 11 individual localised plans cover the plan area, which establish localised issues and sets priority actions and a programme to achieve them.
Central Bedfordshire Council, Housing Strategy 2011/12 - 2015-16	The Strategy sets out the strategic direction for housing in Central Bedfordshire. The key strategic priorities include ■ Economic development and sustainable communities ■ Using council assets to aid the delivery of growth and housing ■ Meeting the accommodation and support needs of older persons and vulnerable people ■ Providing housing options for the whole community
Central Bedfordshire Environmental Framework (2016-)	The Environmental Framework brings together brings a range of studies, assessments and guidance documents, covering natural environmental enhancement and protection, sustainable resource management and the challenge of both mitigating the impact of climate change and adapting to the inevitable impacts.
Bedfordshire and Luton Strategic Green Infrastructure Plan (2007)	The Plan sets a spatial vision for establishing a strategic green infrastructure framework for Bedfordshire and Luton which can be used to guide the development of more detailed GI plans.
Greensand Trust, Mid Bedfordshire Green Infrastructure Plan, 2008	The Plan supplements the Strategic GI Plan (above), providing an assessment of the GI assets and opportunities and identifying a GI network of multifunctional spaces and connections that should be protected and enhanced in the future development of the area.
Central Bedfordshire Council, Rent Strategy 2014/15	The Strategy assists in the delivery of new social housing and in providing an offer which is more diverse for the range of people accessing social housing, providing alternatives to traditional social rent.

Central Bedfordshire Council, Leisure Strategy, 2014-2019	The Strategy provides the evidence base and policy standards / facility requirements to secure new or improved leisure facilities as a result of new housing development, and supporting increased health and wellbeing of residents.
Central Bedfordshire Together Local Strategic Partnership, Sustainable Communities Strategy, 2010-2031	The Strategy seeks to improve the economic, social and environmental well-being of the area and the people who live there. It sets priorities for the area underpinned by the themes of creating the conditions for economic success and community prosperity, and raising standards and tackling inequalities.
Neighbourhood Plans	http://www.centralbedfordshire.gov.uk/planning/policy/neighbourhood-planning/areas.aspx Some 20 Neighbourhood Plans designated in the CBC area that consider local aspirations for the communities.
North Hertfordshire District Council Draft Local Plan 2011-2031	This Local Plan seeks to address the key issues facing North Hertfordshire and will set a strategic vision and spatial strategy for the District over the period 2011 to 2031. The key challenges for the area are - Identifying and delivering the most sustainable forms and patterns of development around the District, - Providing the right type and level of growth to meet the needs of the District and considering the strategic needs of adjoining authorities, - Protecting and enhancing the environment and encouraging the prudent use of resources, and - Creating places where people want to live, work and spend their leisure time.
Luton Borough Council, Luton Local Plan 2011-2031	The Luton Local Plan provides a strategy for the distribution and level of development and supporting infrastructure, a set of proposals to meet that strategy, policies to deal with planning applications and proposals for monitoring the success of the plan. 6,700 dwellings need to be delivered in the borough to meet market and affordable housing requirements.
South Cambridgeshire District Council Local Plan	The Local Plan sets the levels of employment and housing development that should be provided over the plan period to best meet the needs of the area and establish a clear strategy for meeting development needs in the most sustainable way that protects the quality of life of existing and future residents. It identifies the objectively assessed need for 22,000 additional jobs and 19,000 new homes in South Cambridgeshire.
Bedford Borough Council Local Plan Draft Local Plan 2032	Bedford Borough Council is preparing a local plan that will set out how much growth there should be in the borough in coming years (housing, jobs and associated infrastructure) and where it should take place. The Draft Plan yet to be published.
Milton Keynes Council Plan	The Local Plan is mainly concerned with development and the environment of the Borough of Milton Keynes, but within a wider economic and social context. Objectives include Improvement to the vitality of town and local centres, the reduction social exclusion and improve equality of opportunity amongst social groups, and access to community facilities, services and information.
Dacorum Borough Council	Saved Local Plan (adopted 2004) and Core Strategy (Adopted 2013). Current work on producing a single Local Plan, with a call for sites undertaken in 2015

St Albans City and District Council Strategic Local Plan 2011-2031	Strategic Local Plan 2011-2031 Publication Draft 2016.
Mayor of London, The London Plan, March 2015	The London Plan is the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London over the next 20–25 years. The Mayor has also had regard to the principle that there should be equality of opportunity for all people
Aylesbury Vale District Council, Vale of Aylesbury Local Plan	The Vale of Aylesbury Local Plan (Draft Plan due spring 2016) has a housing target of 26,800 new homes, with 14,000 already been granted planning permission and completed since 2003, giving a net figure to find of around 13,000 homes. The forecast requirement for the district is 22ha of employment land whilst the council has a supply of over 70ha. The council is therefore considering which employment sites it can reallocate to other uses including housing. The councils to the south of Aylesbury Vale district have identified an estimated collective unmet need of 12,000 homes.
SA/SEAs of emerging & adopted Local Plans	All Local Plans adjoining the CBC area have been subject to statutory SA incorporating the requirements of the SEA Directive/Regulations.
SA/SEA Report (March 2017) of the draft CBLP	The developing draft CBLP has also been subject to SA/SEA and has informed, and been informed by, this EqIA. This SA includes objectives and criteria on meeting the needs of all residents and communities, improving health and wellbeing, and reducing inequalities.

Appendix II: Central Bedfordshire Equality and Diversity Impact Assessment Screening

EqlA Key and Method Notes:

The assessment uses a simplified version of the SA/SEA appraisal key applied across the plan's draft policies, with the assessment informed by decision aiding questions:

- Will the policy have a negative effect on any of the protected characteristics?
- Will the policy have a positive effect on any of the protected characteristics?
- How can identified negative effect be minimised or removed?
- How can identified positive effect be improved or enhanced?
- Is monitoring of the issues required?

Assessment Key	
+	Positive Effect
-	Negative effect
0	Neutral Effect
?	Unknown or Uncertain Effect

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
Plan Vision									
Central Bedfordshire has taken full advantage of its exceptional strategic position as the central hub of the East-West Oxford to Cambridge growth corridor and its existing strategic north-south routes (M1/A1/East Coast Mainline/Thameslink) to deliver new high tech employment supported by sustainable new homes in a number of new village clusters and market town extensions which are well integrated into the existing high quality landscape. The heritage and distinctiveness of the market towns and villages has been preserved and enhanced by moderate growth ensuring a high quality environment for all residents. The new businesses and population are served by excellent community, transport and communications infrastructure. Multi-service hubs have been delivered to support strong communities and new rail	+	+	+	+	+	+	+	+	+

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
stations at Wixams and Tempsford New Market Town and the Oxford to Cambridge Expressway have ensured excellent connectivity.									
Commentary: The Plan Vision outlines how a balanced growth policy will be pursued across Central Bedfordshire that will promote sustainable economic growth, with benefits for all residents, whilst protecting the environment, cultural heritage, character and urban landscape of the area. This will have benefits for all protected characteristics, with positive social, health and economic benefits likely to occur.									
Draft CBC Local Plan Strategic Objectives									
SO1 Ensure sustainable growth including through the provision of community hubs	+	+	+	+	+	+	+	+	+
SO2 Delivering enough homes & jobs to meet needs; good urban design	+	+	+	+	+	+	+	+	+

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
SO3 Conserve and enhance heritage assets and settings	+	+	+	+	+	+	+	+	+
SO4 High quality and sustainable design of neighbourhoods	+	+	+	+	+	+	+	+	+
SO5 Provide employment needs	+	+	+	+	+	+	+	+	+
SO6 Employment land for different sectors & manage surplus land	0	0	0	0	0	0	0	0	0
SO7 Link deprived areas with employment benefits	+	+	+	+	+	+	+	+	+
SO8 Address housing needs in Central Bedfordshire	+	+	+	+	+	+	+	+	+
SO9 Reduce reliance on use of car & promote sustainable transport	+	+	+	+	+	+	+	+	+
SO10 Improve bus and rail facilities; encourage shift from road to freight	+	+	+	+	+	+	+	+	+
SO11 Promote healthier & more active lifestyles	+	+	+	+	+	+	+	+	+
SO12 Encourage wildlife networks & provide new open spaces	+	+	+	+	+	+	+	+	+
SO13 Support adaptation to Climate Change; reduce pollution impacts	+	+	+	+	+	+	+	+	+

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
Commentary: Most the Plan's Strategic Objectives are likely to have positive effects on the protected characteristics. Objectives 1,2,4,5 and 8 will provide housing and help create a safe, high quality and sustainable urban landscape for all protected characteristics to benefit, with social, health and safety benefits for all groups. Objectives 6 and 7 will provide jobs, encourage economic development and ensure deprived areas benefit from economic growth. This will have benefits for all residents in Central Bedfordshire, including protected characteristics. Objectives 9-10 will enhance the existing transport network within Central Bedfordshire and promote sustainable modes of transport, with benefits for all residents, including protected characteristics, due to better accessibility and increased social mobility. Objectives 11 and 12 promote the provision of public open space and increased accessibility to leisure facilities, open spaces and green spaces for all residents. This is likely to have health and social benefits for all protected characteristics. Objective 13 aims to protect the natural environment of Central Bedfordshire, prevent pollution and mitigate climate change effects, with benefits for health and cultural well-being for all residents, including protected characteristics.									

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
Strategic Policies									
Growth Strategy	+	+	+	+	+	+	+	+	+
Presumption in Favour of Sustainable Development	+	+	+	+	+	+	+	+	+
Master Planning for Strategic Growth Locations	0	0	0	0	0	0	0	0	0
Gypsy and Traveller, and Travelling Showpeople Pitch Requirement	0	0	0	0	0	+	0	0	0
Development in Green Belt, Coalescence, Important Countryside Gaps & Settlement Envelopes	+	+	+	+	+	+	+	+	+
Commentary: The Growth Strategy Policy will provide housing for Central Bedfordshire, which will have benefits for all residents, including protected characteristics. The Gypsy and Traveller policy will have benefits for the protected characteristic by providing pitches and plots for caravans/motorhomes, with social inclusion benefits. The Green Belt policy focuses on enhancing the positive use of the Green Belt and managing development in the Green Belt to ensure the rural character is protected with likely positive effects for protected characteristics, including health and social benefits through minimising coalescence and retaining community identities. All other strategic policies will have neutral effects for all protected characteristics.									

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
Development Management Policies									
Infrastructure, Communications & Transport									
1 Provision for Social & Community Infrastructure	+	+	+	+	+	+	+	+	+
2 Indoor Sport & Leisure Facilities	+	+	+	+	+	+	+	+	+
3 Broadband & Telecommunications Infrastructure	+	+	+	+	+	+	+	+	+
4 Strategic Transport Improvements	+	+	+	+	+	+	+	+	+
5 Mitigation of Transport Impacts on the Network	+	+	+	+	+	+	+	+	+
6 Highway Safety & Design	+	+	+	+	+	+	+	+	+
7 Connectivity & Accessibility	+	+	+	+	+	+	+	+	+
8 Development & Public Transport Interchanges	+	+	+	+	+	+	+	+	+
9 Low Emission Vehicles	+	+	+	+	+	+	+	+	+
10 Management of Freight	+	+	+	+	+	+	+	+	+

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
11 Parking	+	+	+	+	+	+	+	+	+
Commentary: The draft policies for Communications & Transport are all likely to have positive effects on protected characteristics. Policies 1 and 2 will protect community and social facilities, including indoor sports facilities, providing social and health benefits for all residents. Policy 3 will ensure certain developments will have superfast broadband and that any new telecommunications equipment will not have negative visual and landscape effects. Policies 4-8 will improve Central Bedfordshire's transport network, providing better public transport and connectivity for all protected characteristics. Policy 9 promotes low emission vehicles, with positive health effects for all residents. Policy 10 will protect communities from the impacts of developments that will result in high levels of freight. Policy 11 ensures adequate and safe parking is provided for developments, benefitting all residents. Promotion of cycling and walking, and ensuring sufficient community & social facilities, will have direct positive effects on health and well-being.									
Housing									
1 Housing Mix	+	+	+	+	+	+	+	+	+
2 Housing Standards	+	+	+	+	+	+	+	+	+
3 Supporting Older People	+	0	0	0	0	0	0	0	0

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
4 Affordable Housing	+	+	+	+	+	+	+	+	+
5 Rural Exception Sites	+	+	+	+	+	+	+	+	+
6 Starter Homes	+	+	+	+	+	+	+	+	+
7 Self & Custom Build Housing	0	0	0	0	0	0	0	0	0
Commentary: Policy 1 aims to provide a range of housing types that will meet the needs of all sections of the community, including protected characteristics. Policy 2 ensures houses meet defined standards, which includes disability access where appropriate. Policy 3 focuses on providing suitable housing for older people in suitable locations, with positive benefits for this protected characteristic but neutral effects for other protected characteristics. Policy 4 outlines the requirement for the development of affordable homes with a mix of tenures, with positive benefits for all protected characteristics. Policy 5 ensures rural exception sites will have affordable housing with a mix of tenures. Policy 6 outlines the Starter Homes requirement, with benefits for younger people and other protected characteristics. Policy 7 ensures that self-build housing does not compromise the ability of the Council to meet housing needs & therefore neutral effects as not really applicable to this assessment. Provision of a range of housing will have positive effects, direct and indirect, on health and wellbeing.									

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
Employment & Economy									
1 Employment Sites and Uses	+	+	+	+	+	+	+	+	+
2 Change of Non-Employment Uses	+	+	+	+	+	+	+	+	+
3 Employment Proposals outside Settlement Envelopes	+	+	+	+	+	+	+	+	+
4 Rural Economy & Tourism	+	+	+	+	+	+	+	+	+
5 Significant Facilities in the Countryside and Green belt	+	+	+	+	+	+	+	+	+
Commentary: The employment and economy policies all aim to ensure that the area has a thriving and growing economy, as well as creating new employment land and protecting existing employment land. These policies will help Central Bedfordshire with new jobs and a strong economy, benefitting residents and including all those with protected characteristics. Provision of jobs and local employment will have positive effects, direct and indirect, on health & well-being.									
Retail & Town Centre Uses									
1 Town Centre Uses	+	+	+	+	+	+	+	+	+
2 Retail for minor services centres, villages and the rural economy	+	+	+	+	+	+	+	+	+
3 Town Centre Development	+	+	+	+	+	+	+	+	+

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
Commentary: The retail and town centre policies aim to encourage development of town centres and the creation of new retail uses that will support vibrant and diverse neighbourhoods, as well as the protection of existing facilities. Residents, including all protected characteristics groups, will benefit from the improvement to their local environment, with positive social, health and economic benefits likely to occur.									
Environmental Enhancement									
1 Green Infrastructure	+	+	+	+	+	+	+	+	+
2 Enhancing ecological networks	+	+	+	+	+	+	+	+	+
3 Nature Conservation	+	+	+	+	+	+	+	+	+
4 Trees, Woodlands & Hedgerows	+	+	+	+	+	+	+	+	+
5 Landscape Character and Value	+	+	+	+	+	+	+	+	+
6 Tranquillity	+	+	+	+	+	+	+	+	+
7 The Chilterns Area of Outstanding Natural Beauty	+	+	+	+	+	+	+	+	+

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
8 Greensand Ridge Nature Improvement Area	+	+	+	+	+	+	+	+	+
9 Forest of Marston Vale	+	+	+	+	+	+	+	+	+
10The Bedford & Milton Keynes Waterway Park	+	+	+	+	+	+	+	+	+
11 Public Rights of Way	+	+	+	+	+	+	+	+	+
12 Outdoor sport, leisure & open space	+	+	+	+	+	+	+	+	+
13 Climate Change & Sustainability	+	+	+	+	+	+	+	+	+
14 Renewable Energy Development	+	+	+	+	+	+	+	+	+
15 Flood Risk Management	+	+	+	+	+	+	+	+	+
16 Development close to watercourses	+	+	+	+	+	+	+	+	+
17 Sustainable Drainage	+	+	+	+	+	+	+	+	+
18 Water Quality	+	+	+	+	+	+	+	+	+

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
19 Pollution	+	+	+	+	+	+	+	+	+
20 Applications for Minerals & Waste Development	+	+	+	+	+	+	+	+	+
Commentary: Policies 1-10 aim to protect and enhance the natural environment within Central Bedfordshire. The protection of the environment will result in positive effects for local residents and protected characteristics such as benefits for health and cultural well-being. Policies 11 and 12 will result in positive benefits for all groups through maintaining/enhancing access to footpaths and leisure facilities with positive effects for health & well-being that will be cumulative in the longer term. Policies 13-20 will help reduce residents' exposure to environmental risks such as flooding and pollution, as well as focusing on promoting sustainability and renewable energy sources, with positive effects for all protected groups' health and safety.									
High Quality Development									
1 Successful and Sustainable Places	+	+	+	+	+	+	+	+	+
2 Back-land Development	+	+	+	+	+	+	+	+	+
3 Larger Windfall Sites	+	+	+	+	+	+	+	+	+

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
4 Small Open Spaces	+	+	+	+	+	+	+	+	+
Commentary: Policies relating to high quality development will have wide ranging benefits for all residents. Policy 1 ensures that developments will meet building design standards that will help prevent crime, allow safe access for all residents, and minimise negative effects such as noise and light pollution. Policy 2 ensures back-land site development integrates well, is of high standard, and has good access for all residents. Policy 3 focuses on large windfall sites having mixed-use developments. Policy 4 ensures visual amenity values and ecological networks in the area are not adversely affected by new development. These policies will have benefits for all residents, including health benefits, safety benefits and social mobility benefits, all through the creation of a safe and well-designed urban landscape.									
Historic Environment									
1 Archaeology	+	+	+	+	+	+	+	+	+
2 Historic Parks & Gardens	+	+	+	+	+	+	+	+	+
3 Built Heritage	+	+	+	+	+	+	+	+	+
Commentary: These policies seek to protect designated heritage assets, which can result in positive effects for residents & all protected groups with regard to social, health and cultural benefits.									

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
Development in the Countryside									
1: New Dwellings in the Countryside	+	+	+	+	+	+	+	+	+
2: Re-use & Replacement of Buildings in the Countryside	+	+	+	+	+	+	+	+	+
3: Redundant Sites within the Countryside	+	+	+	+	+	+	+	+	+
4: Rural Workers Dwellings	+	+	+	+	+	+	+	+	+
5: Equestrian & Livestock Related Development	0	0	0	0	0	0	0	0	0
6: Agricultural Land	+	+	+	+	+	+	+	+	+
Commentary: Policies 1-4 focus on development in the rural areas of Central Bedfordshire, with a focus on reusing and redeveloping existing redundant buildings, and enabling key workers to live near their work. There are possible positive effects for all protected characteristics due to the provision of new housing in a sustainable way by renovating buildings. Policy 5 is specifically for animal related development, and therefore unlikely to be directly relevant for protected characteristics. Indirect positive effects on all protected characteristics and health/wellbeing through protection of rural economy & jobs.									

EqIA Protected Characteristics Elements of Draft Plan	Age	Disability	Gender Reassignment	Marriage and Civil partnership	Pregnancy and Maternity	Race	Religion or belief	Sex	Sexual Orientation
	1	2	3	4	5	6	7	8	9
Policy 6 will protect best and most versatile agricultural land which will have positive benefits for all groups due to the protection of their environment and the local economic benefits of maintaining a thriving agricultural industry. Encouraging locally grown food will also have positive effects for health and well-being.									