

Three Rivers District Council

**Development Management Policies
Local Development Document
Sustainability Appraisal**

July 2012

**Appendix 5: Sustainability Appraisal
Detailed Assessment Matrix**

Assessment Key:

Significance:

Symbol	Description
++	Very sustainable - Option is likely to contribute significantly to the SA/SEA objective
+	Sustainable - Option is likely to contribute in some way to the SA/SEA objective
0	Neutral – Option is unlikely to impact on the SA/SEA objective
?	Uncertain – It is uncertain how or if the Option impacts on the SA/SEA objective
-	Unsustainable – Option is likely to have minor adverse impacts on the SA/SEA objective
--	Very unsustainable – Option is likely to have significant adverse impacts on the SA/SEA objective

Timescale:

Symbol	Meaning	Comment
ST	Short Term	0-10 years
MT	Medium Term	10-20 years
LT	Long Term	After life of plan

Likelihood:

Symbol	Meaning	Comment
H	High	High risk of occurrence
M	Medium	Medium risk of occurrence
L	Low	Low risk of occurrence

Scale:

Symbol	Meaning	Comment
L	Local	Impact within Three Rivers
R	Regional	Impact on The East of England or neighbouring authorities
N	National/ Supra-national	UK or global impact

Permanence:

Symbol	Meaning	Comment
P	Permanent	Irreversible effect
T	Temporary	Transient or reversible effect

Type:

Symbol	Meaning	Comment
C	Cumulative	On its own the policy option does not have significant effect, but when combined with other policies may have significant impact
Sy	Synergistic	Synergistic effects occur when policies interact to produce a total effect greater than effect of an individual policy e.g., interaction between habitats and humans when habitats reach their capacity
S	Secondary	Indirect effects that is not a direct result of the policies, however effects may occur through complex pathways

Assessment template

DM1 Residential Design and Layout

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/Comments
Biodiversity	+	M T	H	L	P	Policy makes indirect reference to protection of hedges, grass verges etc, having a likely positive impact against this objective	
Water quality	0					No direct relation to this SA objective.	
Flood risk	0					No direct relation to this SA objective.	
Soils	0					No direct relation to this SA objective.	
CO ₂ emissions	+	M T	H	L	P	The policy will not support development that would result in the generation of excessive levels of traffic and will therefore help to limit growth in CO ₂ emissions.	
'Climate change proof'	0					Policy will have no impact on this objective	
Air quality	+	M T	H	L	P	Policy discourages development that is likely to result in excessive traffic, a positive approach to future development.	
Use of brownfield land	+	M T	H	L	T	Through infill and conversion the policy supports development/ additional development on brownfield land	
Resource efficiency	0					No direct relation to this SA objective.	Discussion on waste management in infill or conversion related development is recommended. Waste relates to both construction and operational waste.
Historic & cultural assets	+	M T	H	L	T	Policy is supportive of preservation of local character and is therefore likely to maintain existing historic character areas around each site.	
Landscape and townscape	+	M T	H	L	T	Policy is supportive of preservation of local character whilst considering infills and conversions, thus is likely to maintain existing townscape and landscape features around each site.	
Health	0					No direct relation to this SA objective.	
Sustainable development patterns & accessibility	0					No direct relation to this SA objective.	
Equity & social exclusion	0					No direct relation to this SA objective.	

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/Comments
Good quality housing	+	M T	H	L	T	Various aspects of this policy seek to achieve a good quality of housing through high quality design. Consideration of privacy and amenity are important factors here.	
Community identity & participation	+	M T	H	L	T	The policy protects against the loss of residential amenity which will help to maintain community interactions in residential areas.	
Crime	+	M T	M	L	P	The supporting policy text requires new developments to demonstrate how designs could address crime (perceived and actual) and recommends the Secured by Design standards-supporting this SA objective.	
Sustainable prosperity & growth	0					No direct relation to this SA objective.	
Revitalise town centres	0					No direct relation to this SA objective.	

DM2 Green Belt

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	M T	M	R	P	The policy aims to reduce encroachment into to open countryside and should therefore help to protect local biodiversity.	
	?	S T	H	L	T / P	Where sites represent “very special circumstances”, negative effects on biodiversity of their development during construction and potentially during the operations phase may occur.	Encourage early interventions to minimise the potential negative impacts on species and habitats.
Water quality	0	0	0	0	0	No direct relation to this SA objective.	
Flood risk	0	0	0	0	0	No direct relation to this SA objective.	
Soils	+	M T	M	R	P	The policy aims to reduce encroachment into to open countryside and should therefore help to protect soils.	
	-	S T	H	L	P	Where sites represent “very special circumstances” negative effects on soils are likely to occur through loss of top soil at these sites on Greenfield land.	
CO ₂ emissions	0	0	0	0	0	No direct relation to this SA objective.	
‘Climate change proof’	0	0	0	0	0	No direct relation to this SA objective.	
Air quality	0	0	0	0	0	No direct relation to this SA objective.	
Use of brownfield land	0	0	0	0	0	No direct relation to this SA objective, although by safeguarding from encroachment into the countryside the policy indirectly may encourage the use of brownfield sites outside the Green Belt.	
Resource efficiency	0	0	0	0	0	No direct relation to this SA objective.	
Historic & cultural assets	+	M T	M	R	P	The policy aims to reduce encroachment into to open countryside and should therefore help to protect local historic landscapes.	
Landscape and townscape	+	M T	M	R	P	The policy aims to reduce encroachment into to open countryside and should therefore help to protect local landscapes. In addition the policy requires any new development (residential and non-residential) to be in keeping with the surroundings.	
	?	L T	H	L	P	The visual impact that the proposed sites in the Sites Allocation Document on the existing landscape and townscape features may range between neutral to significant negative- dependent on the proposed feature’s design and purpose. It is also not clear how buildings associated with infrastructure. such as water treatment	Include recommendations for designing of developments already within the Sites Allocation Document to be sympathetic its landscape and townscape settings.

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
						works. will affect the landscape setting within and around a Greenbelt.	
Health	+	M T	M	R	T	The policy will prevent development that has a detrimental effect on the locality (e.g. by noise, smell or heavy traffic). This will be beneficial for local health and well-being.	
Sustainable development patterns & accessibility	0	0	0	0	0	No direct relation to this SA objective.	
Equity & social exclusion	0	0	0	0	0	No direct relation to this SA objective.	
Good quality housing	0	0	0	0	0	No direct relation to this SA objective.	
Community identity & participation	+	M T	M	R	T	The policy will prevent development that has a detrimental effect on the locality (e.g. by noise, smell or heavy traffic). This will be beneficial for local communities and their positive interactions.	
Crime	0	0	0	0	0	No direct relation to this SA objective.	
Sustainable prosperity & growth	?					The policy may have adverse effects on local businesses by preventing some conversions or expansions.	
Revitalise town centres	0	0	0	0	0	No direct relation to this SA objective.	

DM3 The Historic Built Environment

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	M T	M	L	T	The policy will protect trees and hedgerows in Conservation Areas, with gardens, roadside banks and verges also being retained. Biodiversity associated with these features will therefore also be protected (secondary effect).	
Water quality	0					No direct relation to this SA objective.	
Flood risk	0					No direct relation to this SA objective.	
Soils	+	MT	M	L	T	Protecting historic sites, particularly archaeological sites, will help to safeguard soils from development.	
CO ₂ emissions	0					No direct relation to this SA objective.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	0					No direct relation to this SA objective.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	0					No direct relation to this SA objective.	
Historic & cultural assets	++	M T	H	L	P	Protection of all aspects of the historic environment; including use of appropriate building materials; and ensuring nearby development respects design and scale will significantly progress this SA objective. The policy is further strengthened by stating its position on how planning applications will be dealt with when <u>heritage assets with archaeological interest</u> are present, the aim being to protect these features..	Elaborate on the 'exceptional' circumstances for Listed buildings demolition in order to limit ambiguity. Further, information/explanation on the material, proportions and scale that are acceptable in the development proposals within conservation areas is recommended. Alternatively future SPDs may address these aspects.

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
							The policy would benefit from making reference to the Hertfordshire Historic Landscape Characterisation, with the aim of protecting the most important historic landscapes in the District.
Landscape and townscape	+	M T	H	L	P	Trees, hedgerows, historic gardens, historic boundaries will all be retained and view lines will also be preserved. The combined elements of this policy will significantly progress this SA objective.	
Health	0					No direct relation to this SA objective.	
Sustainable development patterns & accessibility	0					No direct relation to this SA objective.	
Equity & social exclusion	0					No direct relation to this SA objective.	
Good quality housing	0					No direct relation to this SA objective.	
Community identity & participation	+	M T	H	L	P	Protecting the historic environment will help to maintain community identity and quality of life.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	0					No direct relation to this SA objective.	
Revitalise town centres	+	M T	H	L	P	Protecting historic environment, including parks and gardens, will add to vitality of town centres.	

DM4 Carbon Dioxide Emissions and On-Site Renewable Energy

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	L T	M	L, R, N	P	By limiting growth in CO ₂ emissions the policy may bring indirect positive effects on local, regional and national biodiversity resources	
Water quality	0					No direct relation to this SA objective.	
Flood risk	+	L T	M	L, R, N	P	By limiting growth in CO ₂ emissions the policy may help in a very small way will help to reduce long-term future levels of flood risk (secondary).	
Soils	0					No direct relation to this SA objective.	
CO ₂ emissions	+	L T	H	N	P	By setting detailed targets for carbon emission reduction and promoting renewable energy use the policy is supportive of this SA objective, although the target set for 2013 is not considered challenging to push the climate change agenda in a significant way. Nevertheless, with the Core Strategy Policy CP1 that requires one unit or more residential and all new commercial developments to have a C-Plan energy statement DM policy 4 should have cumulative positive effects in contributing to reduced carbon emissions from new developments.	Appropriate arrangements for monitoring/ reporting CO ₂ emissions, during the operational phase is recommended. It is acknowledged that such a system may need wider resources, which perhaps the neighbouring Councils could jointly initiate.
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	0					No direct relation to this SA objective.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	+	M T	M	N	P	Encouraging renewable energy indirectly will lead to usage of non-renewable resources. Through adoption of Code for Sustainable Homes, energy efficiency in buildings can be achieved, however only from 2016. In the short term, targets relative to Part L Regulations will bring positive effects.	Encourage use of construction material with less embodied carbon and encourage life cycle analysis of carbon.
Historic & cultural assets	?					There is the potential for some adverse effects likely on historic environments and the setting of Listed Buildings from on-site renewable energy equipment and infrastructure. However, this will be dependent on the characteristics of the area where development is proposed.	Policy DM5 will help to avoid or mitigate any adverse effects.

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Landscape and townscape	?					There is the potential for some adverse effects likely on local landscapes and townscapes from on-site renewable energy equipment and infrastructure. However, this will be dependent on the characteristics of the area where development is proposed.	Policy DM5 will help to avoid or mitigate any adverse effects.
Health	+	M T	M	L	P	The requirements placed by this policy will ensure that future homes are built to a high quality. This will have positive effects on health, particularly for those living in affordable housing who might otherwise be living in poor quality housing with its associated ill-health effects.	
Sustainable development patterns & accessibility	0					No direct relation to this SA objective.	
Equity & social exclusion	0					No direct relation to this SA objective.	
Good quality housing	+	M T	M	L	P	The requirements placed by this policy will ensure that all future homes are built to a high quality.	
Community identity & participation	0					No direct relation to this SA objective.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	+	M T	M	L	P	Policy will promote energy efficiency (new and existing stock), thus will have both direct and indirect positive effect on prosperity. The District may even consider promoting energy efficiency/ renewable technology business sector, and set an exemplar in the region.	
Revitalise town centres	0					No direct relation to this SA objective.	

DM5 Renewable Energy Developments

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	M T	M	L	T	By taking the natural environment and biodiversity into consideration when assessing proposals for large-scale renewable energy developments, the policy supports this SA objective.	
Water quality	+	M T	M	L	T	Assessment of impacts on water quality will be taken into account when considering proposals for large-scale renewable energy developments, implying mitigation measures will be also considered whilst developing a renewables project.	
Flood risk	?					The Council's approach to allowing renewable technology installations in flood risk areas and its approach towards addressing internal flooding due to installations is unclear. For example, will the Council allow wind turbines in flood plains, provided these installations will not affect functionality of the plains and not add to any flood risk?	Policy should discuss implication of renewables installation on flooding and vice versa
Soils	0					No direct relation to this SA objective.	
CO ₂ emissions	+	M T	M	N	P	Providing the policy allows for new renewable energy developments to be built there should be a subsequent reduction in carbon emissions contribution.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	+	M T	M	L	T	Local air quality will be taken into account when considering proposals for large-scale renewable energy developments.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	+	M T	M	L	T	The policy aims at preserving depleting fossil resources, a positive against this SA objective.	Further the policy can encourage renewables projects to use land and construction materials efficiently. The policy should discuss state of the land, material and human resources after project decommissioning i.e. require an exit strategy.
Historic & cultural assets	+	M T	M	L	T	The policy requires historic and archaeological assets to be taken into account when considering proposals for large-scale renewable energy developments- thus supporting	

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
						this SA objective.	
Landscape and townscape	+	M T	H	L	T	Landscape character will be taken into account when considering proposals for large-scale renewable energy developments. The openness and visual amenity of the Green Belt will also be taken into account. Synergistic positive effect is likely with DM3 The Historic Built Environment.	
Health	+	M T	H	L	T	The policy requires that public access to the countryside is to be taken into account when considering proposals. This will help prevent loss of areas used for healthy recreation activities.	
Sustainable development patterns & accessibility	0					No direct relation to this SA objective.	
Equity & social exclusion	0					No direct relation to this SA objective.	
Good quality housing	0					No direct relation to this SA objective.	
Community identity & participation	+	M T	H	L	T	The policy requires that local amenity is to be taken into account when considering proposals. This will help protect community interactions and retain community identity.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	+	M T	L	L	T	By requiring on-site renewable energy, for the policy will help build a sustainable future in terms of natural resource efficiency. In addition, renewable technology installations and operations may generate job opportunities (secondary), a positive, but appropriate skills training will be required.	
Revitalise town centres	0					No direct relation to this SA objective.	

DM 6 Biodiversity, Trees, Woodlands, Watercourses and Landscaping

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	M T	H	R	T	<p>The policy aims to protect and enhance habitats and species and protected sites. It also prescribes the management of sites, maintaining and enhancing networks of sites and providing compensation for any loss of habitats. It is also supportive of protecting existing trees, hedgrows and woodlands.</p> <p>Policy is very supportive of reducing occurrences of habitat fragmentation and to seek opportunities to restore any such occurrence. It is also supportive of protecting aquatic habitats.</p> <p>This policy is likely to have synergistic positive effect with the Core Strategy policy CP9 Green Infrastructure.</p>	Appropriate stakeholders should be involved while deciding criteria for exceptional circumstances that may affect biodiversity. .
Water quality	+	M T	M	R	T	<p>The policy explicitly makes reference to the requirements of the Water Framework Directive to be met by new developers, thus progressing protection and may be improve water quality. By protecting the biodiversity there are likely be indirect positive effects on water quality, for example by preventing development in areas sensitive to water pollution.</p>	
Flood risk	+	M T	M	R	T	<p>By protecting biodiversity there may be indirect positive impacts on flood risk. For example, naturally draining areas would be less of a flood risk than areas of hard-standing associated with development.</p>	
Soils	+	M T	M	R	T	<p>By protecting biodiversity there will also be directly positive impacts on soils. Soil resources will not be lost to new development if wildlife sites are protected.</p>	
CO ₂ emissions	+	L T	M	R	P	<p>By maintaining woodlands and trees and enhancing biodiversity in general, the policy will help in the maintenance and creation of carbon sinks.</p>	
'Climate change proof'	+	M T	M	R	T	<p>The policy promotes protection of natural ecosystem function and to maintain a network of wildlife sites which will allow habitats and species to adapt more to climatic change and will allow development to be more robust in withstanding adverse climate effects.</p>	
Air quality	+	M T	M	R	T	<p>By protecting biodiversity there may be indirect positive impacts on air quality. For example, tree species and natural environments can absorb more air pollution.</p>	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	+	M	M	R	T	By protecting areas of geological importance this will help to satisfy the underlying criteria	

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
		T				of this SA objective, i.e. safeguarding mineral resources and preventing mineral extraction in areas of environmental or wildlife value.	
Historic & cultural assets	+	M T	M	R	T	Protection of woodlands, trees, hedgerows etc will help to protect historic landscapes.	
Landscape and townscape	+	M T	H	R	T	Protecting and enhancing wildlife sites, woodlands and geological and physiographical features will not only protect but also enhance the landscape and townscape, thereby significantly progressing this SA objective.	
Health	+	M T	M	R	T	Protecting natural areas will enable people to use the areas for outdoor leisure activities.	Through this policy the District is likely to protect green spaces in the urban area. The policy is likely to bring significant positive effect against the SA objective, if the policy supports 'enhancement', in addition to the 'protection' of green spaces.
Sustainable development patterns & accessibility	+	M T	H	R	T	Protecting natural areas will contribute to the overall sustainable pattern of development.	
Equity & social exclusion	0					No direct relation to this SA objective.	
Good quality housing	0					No direct relation to this SA objective.	
Community identity & participation	+	M T	M	L	T	By protecting natural areas and species, local distinctiveness and pride of place will be encouraged. Urban areas will be attractive places to live, work and visit.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	?					Dependent on the location, new developments may result in improvements to an otherwise less managed landscaped area, in turn increasing inward investment interest.	
Revitalise town centres	0					No direct relation to this SA objective.	

DM7 Landscape Character

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	?					Although the policy considers impact on wildlife, depend on site features by increasing the public access to Landscape Regions, there could be secondary effects to habitats, such as habitat fragmentation from human intervention affecting biodiversity in the medium to the long term.	
Water quality	0					No direct relation to this SA objective.	
Flood risk	0					No direct relation to this SA objective.	
Soils	+	M T	M	R	T	By protecting landscapes and providing for measures to manage, improve and reconstruct landscapes there should be secondary positive impact in terms of protecting soil resources.	
CO ₂ emissions	0					No direct relation to this SA objective.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	0					No direct relation to this SA objective.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	0					No direct relation to this SA objective.	
Historic & cultural assets	+	M T	H	L	T	The policy aims to protect historic character and cultural heritage. It will also help to protect historic landscapes.	
Landscape and townscape	+	M T	H	R	T	The policy significantly progresses this SA objective by protecting various aspects of landscape and topography, and includes measures to strengthen, reinforce, safeguard, manage, improve, restore and reconstruct landscapes. Synergistic positive effect is likely with DM6 Biodiversity, Trees, Woodland and Landscaping.	
Health	+	M T	M	L	T	The policy actively encourages public access and recreation opportunities – where appropriate – which will have long-term health benefits for those making use of these improved opportunities.	
Sustainable development patterns & accessibility	+	M T	M	R	T	Protecting natural areas will contribute to the overall sustainable pattern of development.	
Equity & social exclusion	0					No direct relation to this SA objective.	

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Good quality housing	0					No direct relation to this SA objective.	
Community identity & participation	+	M T	M	L	T	By protecting natural landscapes, local distinctiveness and pride of place will be encouraged. Urban areas will also be more attractive places to live, work and visit.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	0					No direct relation to this SA objective.	
Revitalise town centres	0					No direct relation to this SA objective.	

DM8 Flood Risk and Water Resources

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	M T	M	R	T	The policy encourages new development adjacent to water courses to include river restoration and de-culverting where possible. This will help to protect and enhance aquatic habitats. By promoting the avoidance or mitigation of development in high flood risk areas there may be indirect positive impacts on biodiversity as there would be less likelihood of flood events dispersing harmful pollutants.	
Water quality	++	M T	H	R	T	By promoting the avoidance or mitigation of development in high flood risk areas there are likely to be indirect positive impacts on water quality, for example through reduced run-off of pollutants. Policy also supports water efficiency and the protection of water resources, in new developments.	Policy can consider options to improve water quality from existing baseline, in addition to protection from future development.
Flood risk	+	M T	M	R	T	By promoting the avoidance or mitigation of development in high flood risk areas this policy should have a positive effect on reducing the risk of flooding. A synergistic positive effect is likely when policy DM8 interacts with the Core Strategy policy CP1 Sustainable Development.	
	?					It is not clear whether allowing a buffer of 5m from water bodies for developments will be sufficient for all locations and flooding scenarios, thus unabling to determine whether the risk of flooding to all houses will be avoided and whether the Water Framework Directive objectives may be compromised due to the proximity to water bodies.	
Soils	0					No direct relation to this SA objective.	
CO ₂ emissions	0					No direct relation to this SA objective.	
'Climate change proof'	+	M T	M	R	T	Consideration of flood risk when locating new developments will help with adaptation to climate change.	
Air quality	0					No direct relation to this SA objective.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	0					No direct relation to this SA objective.	
Historic & cultural assets	0					No direct relation to this SA objective.	

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Landscape and townscape	0					No direct relation to this SA objective.	
Health	+	M T	M	R	T	Consideration of flood risk when locating new developments will help avoid future stress related health issues that might occur if a person's property is at risk from flooding. In addition by promoting the avoidance or mitigation of development in high flood risk areas there may be indirect positive impacts on health as there would be less likelihood of flood events dispersing harmful health-affecting pollutants.	
Sustainable development patterns & accessibility	0					No direct relation to this SA objective.	
Equity & social exclusion	0					No direct relation to this SA objective.	
Good quality housing	0					No direct relation to this SA objective.	
Community identity & participation	?					While involving various organisations and authorities, such as Environment Agency, in emergency planning and river corridor restoration is commendable, involvement of residents/ resident organisations is unclear.	Local residents should be involved in emergency planning process and a mechanism to encourage developers to enable this practice is recommended.
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	0					No direct relation to this SA objective.	
Revitalise town centres	0					No direct relation to this SA objective.	

DM9 Contamination and Pollution Control

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	M T	M	L	T	By minimising air, light, land and water pollution (particularly that associated with development on contaminated land) there should be less risk of pollution affecting biodiversity.	Add 'ecological receptors' to the Contaminated land section criteria.
Water quality	+	S T	H	R	T	The policy will ensure that there is no adverse impact on the quality of local groundwater or surface water quality in association with development on or near contaminated land.	
Flood risk	0					No direct relation to this SA objective.	
Soils	+	S T	M	L	T	By requiring remedial action on contaminated land there will be less demand for greenfield or agricultural land to be used for development.	
CO ₂ emissions	+	S T	M	N	P	By tackling air pollutant emissions, CO ₂ emissions should also be reduced as they are likely to arise from the same sources as other pollutants.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	+	M T	M	L	T	Development will also not be permitted where it would adversely affect air quality in an Air Quality Management Area, implying further deterioration of air quality in an area may be limited or the existing levels of air quality may be maintained, thus having a neutral impact.	As cumulative effects from various small developments in an area may be significant than 'adverse' effect from one development, consideration to air pollution mitigation from all development types and sizes, including refurbishment is recommended.
Use of brownfield land	+	S T	M	L	T	By requiring remedial action on contaminated land, brownfield land will likely be used wherever possible, depending on the cost of remedial works.	
Resource efficiency	+	S T	M	L	T	By requiring remedial action on contaminated land, land resources as a whole will be used more efficiently. By emphasising the need to reduce pollution of all types the policy may also indirectly encourage developers to use more efficient processes and fewer resource inputs.	Consider encouraging light pollution reduction for internal lighting too. For

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
							example, encourage refurbishment and any new development proposal to incorporate on demand lighting systems, such as building management systems, Passive Infrared Sensor (PIR)
Historic & cultural assets	0					No direct relation to this SA objective.	
Landscape and townscape	+	S T	M	L	T	By protecting the countryside from various forms of pollution, especially light pollution, this SA objective may be progressed.	
Health	+	S T	M	L	T	Reducing the various forms of pollution may have benefits for public health. For example limiting air pollution will improve air quality. New developments in PDL are likely to address soil contamination therefore address potential risk to human receptors from contaminants as well as to water environment. Overall, these contribute to improve health, directly and indirectly.	
Sustainable development patterns & accessibility	0					No direct relation to this SA objective	
Equity & social exclusion	+	M T	M	L	P	By requiring contamination remediation in new developments, the policy will limit environmental injustice, such as locating less affordable residents close to a land fill or on a contaminated site, addressing potential social exclusion issues.	
Good quality housing	0					No direct relation to this SA objective	
Community identity & participation	0					No direct relation to this SA objective	
Crime	0					No direct relation to this SA objective	
Sustainable prosperity & growth	0					No direct relation to this SA objective	
Revitalise town centres	0					No direct relation to this SA objective	

DM10 Waste Management

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	0					No direct relation to this SA objective.	
Water quality	+	M T	H	R	T	Potential indirect positive effects. Recycling and re-use should reduce the amount of landfill waste and associated leachate into water courses.	
Flood risk	0					No direct relation to this SA objective.	
Soils	+	M T	H	R	T	Recycling on site and increasing recycled and re-used content of new buildings and other recycling increases will reduce demand for new landfill sites, reduce the need for landfill site expansion and reduce leachate pollution.	Include 'increased use of recycled content in construction material' as a criterion under waste reduction measures.
CO ₂ emissions	+	M T	H	N	P	Increasing recycling and re-use will result in reduced CO ₂ emissions, depending on individual materials.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	+	M T	H	R	T	Potential indirect positive effects. Increasing recycling and re-use will reduce amount of waste going to landfill. Landfill can be associated with poor air quality.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	+	M T	H	R	T	Recycling and re-use objectives will inevitably lead to greater material resource efficiency	Consider waste management in demolition waste and setting annual targets for general waste reduction and set targets for construction material, such as percentage recycled content to be used.
Historic & cultural assets	0					No direct relation to this SA objective.	
Landscape and townscape	?					Although policy will be mindful of design in residential and commercial development, explicit reference to interference of waste facilities with townscape is not made; nevertheless cumulative positive effect may occur by interaction with DM3 The Historic Built Environment	
Health	+	M T	H	R	T	The policy protects residential and workplace amenities which will have associated effects in terms of avoiding new health issues.	

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Sustainable development patterns & accessibility	0					No direct relation to this SA objective.	
Equity & social exclusion	0					No direct relation to this SA objective.	
Good quality housing	0					No direct relation to this SA objective.	
Community identity & participation	0					No direct relation to this SA objective.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	0					No direct relation to this SA objective.	
Revitalise town centres	0					No direct relation to this SA objective.	

DM11 Open Space, Sport, Recreation Facilities and Children's Play Space

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	L T	M	L	P	Protection and enhancement of open spaces may have a positive effect on biodiversity as long as human interaction with these spaces do not contribute to habitat defragmentation	
Water quality	0					No direct relation to this SA objective.	
Flood risk	?					Approach towards locating open spaces in flood risk areas is unknown	
Soils	0					No direct relation to this SA objective.	
CO ₂ emissions	0					No direct relation to this SA objective.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	0					No direct relation to this SA objective.	
Use of brownfield land	?	M T	M	L	T	Policy position on open space and children's play space development on PDL is unclear, however cumulative positive effect is likely with the Core Strategy Policy CP1 Sustainable Development.	Use of PDL should be prioritised for open space, sport and recreational facilities
Resource efficiency	0					No significant effect on this objective is predicted, however there is potential to create resource efficiency, such as that of land.	The efficient use of land should be allowed for if PDL is prioritised
Historic & cultural assets	0					No direct relation to this SA objective.	
Landscape and townscape	+	M T	M	L	T	Protecting against the loss of open space and including guidance on new provision and enhancement should significantly improve landscape and townscape.	
Health	+	M T	M	L	T	Providing open space, children's play space and sport and recreation facilities is likely to allow more people to participate in healthy activities.	
Sustainable development patterns & accessibility	+	M T	M	L	T	Through new provision and enhancement, within walking distance this policy is likely to ensure good accessibility to services. It provides a key element of a sustainable development pattern as it contributes significantly to a key social need.	Policy wording can explicitly state enhancements to existing provision and of deficit areas, such as South Oxhey (PPG 17 Study, TRDC, 2010 ¹). In addition to space provision specification, the policy should specify minimum travel distance to emphasise

¹ Three Rivers District Council, PPG 17 Open Space Update, 2010, KKP

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
							accessibility.
Equality & social exclusion	+	M T	M	L	T	Providing open space, children's play space and sport and recreation facilities is likely to help urban areas provide a greater range of services to more people. One of the criteria for this SA objective is to encourage development of sporting opportunities.	
Good quality housing	+	M T	M	L	P	No direct effect to this SA objective, but with appropriate amenity provision the quality of neighbourhood and living standards rise, thus secondary positive effect on this objective is likely.	
Community identity & participation	+	M T	M	L	T	Providing open space, sport and recreation facilities helps urban areas provide a greater range of services and makes them more attractive places that everyone can participate in.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	+	M T	M	L	P	Provision of key amenities within accessible distance from housing units helps build a sustainable community and a desirable neighbourhood, a key to attract inward investments (related to housing), indirectly contributing to sustainable prosperity (secondary).	
Revitalise town centres	+	M T	M	L & R	T	Providing open space, sport and recreation facilities will help the towns to provide a greater range of services and make them more attractive and viable places. This policy when implemented in conjunction with DM3 The Historic Built Environment and the Council's Design Guidance Supplementary Planning Document is likely to produce an integrated design that is visually appealing, and effectively functioning spaces, helping to attract inward investments	

DM12 Community, Leisure and Cultural Facilities

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	0					No direct relation to this SA objective.	
Water quality	0					No direct relation to this SA objective.	
Flood risk	0					No direct relation to this SA objective.	
Soils	0					No direct relation to this SA objective.	
CO ₂ emissions	+	M T	M	N	P	By recognising the importance of sustainable modes of transport the policy should help to reduce the growth of carbon emissions from private vehicles.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	+	M T	M	L	T	By recognising the importance of sustainable modes of transport there are likely to be benefits for local air quality.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	0					No direct relation to this SA objective.	
Historic & cultural assets	0					No direct relation to this SA objective.	
Landscape and townscape	0					No direct relation to this SA objective.	
Health	+	M T	M	L	T	Good provision of health facilities will help to improve overall public health. Access through sustainable modes of transport may improve local air quality with associated health benefits.	
Sustainable development patterns & accessibility	+	M T	M	L	P	Policy considers accessibility as an important criterion to protect existing amenities, as well as in new provision, both are which are positive for this objective.	Policy currently only discusses safeguard from amenity loss; another important aspect to discuss is the likely pressure on existing community facilities associated with new development proposals. Policy should consider improving accessibility to existing cultural amenities where access is an issue. The effect may be upgraded to significant positive effect against the SA objective with the recommendations

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
							incorporated in the policy.
Equity & social exclusion	+	M T	M	L	T	In general, community facilities and amenities provide an opportunity and space for community interaction, thus possibly supporting equality and social inclusion. Additionally emphasis on accessibility provides an opportunity for all age groups to benefit from the amenities.	In addition to physical provision, soft policy measures that protect and enhance social inclusion, such as respecting multi-cultural faith should be considered.
Good quality housing	0					No direct relation to this SA objective	
Community identity & participation	+	L T	M	L	P	Provision of community facilities is likely to provide venues for community gathering, thus creating a sense of identity. Access to these services from the neighbourhood will have a key role in encouraging residents to use these spaces and participate.	
Crime	0					No direct relation to this SA objective	
Sustainable prosperity & growth	+	M T	M	R	P	Appropriate provision of cultural, leisure and community facilities will encourage residents and visitors to the district towns, thus contribute to economic growth Similarly, appropriate play space provision within reasonable distance is a desirable feature in any neighbourhood.	New facilities should be guided by appropriate urban design principles and establish good public realm, particularly near town centres. Synergistic positive effects may occur with other policies such as DM1 Design of Residential Design and Layout and Core Strategy policy CP12-Design of Development.
Revitalise town centres	0					No direct relation to this SA objective	

DM13 Parking

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	0					No direct relation to this SA objective.	
Water quality	0					No direct relation to this SA objective.	
Flood risk	0					No direct relation to this SA objective.	
Soils	0					No direct relation to this SA objective.	
CO ₂ emissions	+	M T	L	L	T	By providing minimum cycle standards there may be an indirect positive impact in terms of making cycling a more feasible mode of transport. Imposing more restrictive car parking standards is likely to reduce car usage, therefore limiting transport emissions, including GHG.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	+	M T	L	L	T	By providing minimum cycle standards and controlled parking standards air quality is likely to improve in the District.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	0					No direct relation to this SA objective.	
Historic & cultural assets	0					No direct relation to this SA objective.	
Landscape and townscape	0					No direct relation to this SA objective.	
Health	0					No direct relation to this SA objective.	
Sustainable development patterns & accessibility	0					No direct relation to this SA objective.	
Equity & social exclusion	+	M T	M	R	T	The policy considers disabled parking in most land use types, thus being sympathetic to some equality groups and supporting this objective.	
Good quality housing	0					No direct relation to this SA objective.	
Community identity & participation	0					No direct relation to this SA objective.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	+	M T	L	L	T	Policy allows adequate parking spaces for retail, restaurants and other A4 uses, thus supporting economic growth, and if the parking spaces are of adequate capacity and within walking distance from main shopping centres, it may add to the pedestrian shopping	

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
						experience.	
	?					Very restrictive parking measures may lead to consumers flight to competing centres such as Watford and Harrow.	
Revitalise town centres	+	M T	L	L	T	Effects on contribution from the policy to revitalise the town centre is mixed as restricted parking could lead to improved pedestrian shopping experience. This is however dependent on a good capacity parking facility available within the footfall of the Town centre. On the other hand, too many restrictions may discourage shoppers who may use Watford or Harrow instead of Three Rivers Town/Village centres.	
	?						

DM14 Telecommunications

SA Objective	Significan	Timescale	Likelihood	Scale	Permanen	Commentary	Recommended mitigation/ Comments
Biodiversity	?					It is unclear how the policy will deal with potential biodiversity impacts	Add biodiversity as a criterion whilst considering telecom proposals.
Water quality	0					No direct relation to this SA objective	
Flood risk	0					No direct relation to this SA objective	
Soils	0					No direct relation to this SA objective	
CO ₂ emissions	0					No direct relation to this SA objective	
'Climate change proof'	0					No direct relation to this SA objective	
Air quality	0					No direct relation to this SA objective	
Use of brownfield land	0					No direct relation to this SA objective	
Resource efficiency	+	S T	M	L	P	Future telecom installation proposals are encouraged to share existing resources, which is a criterion to the planning application decision making process.	
Historic & cultural assets	+	M T	M	L	P	The policy requires installations to be sympathetic to historic features in and around a site.	
Landscape and townscape	+	M T	M	L	P	The policy requires installations to be designed coloured and landscaped to take account of their setting and also to be sympathetic to historic features (and thus townscape) in and around a site, aligned with the NPPF's Core Planning Principles	
Health	+	M T	M	L	P	By ensuring no significant adverse impact occurs on the visual amenity of the neighbours the policy may have positive effect on health (limit potential stress)	
Sustainable development patterns & accessibility	+	M T	M	R	P	Policy is considerate of the flow of free and safe flow of highway users (accessibility)	
Equity & social exclusion	0					No direct relation to this SA objective	
Good quality housing	0					No direct relation to this SA objective	
Community identity & participation	0					No direct relation to this SA objective	
Crime	0					No direct relation to this SA objective	
Sustainable prosperity & growth	+	M T	M	L	T	Policy is supportive of technology improvement (and thus jobs), and at the same time helps safeguard/ enhance historic character (for inward investments)	
Revitalise town centres	0					No direct relation to this SA objective	

DM15 Moorings

SA Objective	Significance	Timescale	Likelihood	Scale	Permanence	Commentary	Recommended mitigation/ Comments
Biodiversity	+	M T	M	L	T	Policy seeks to help achieve biodiversity by ensuring no adverse effect on nature conservation occurs.	
Water quality	0					No direct relation to this SA objective.	
Flood risk	+	M T	M	L / R	P	Policy requires applications for moorings to demonstrate that they will not increase the risk of flooding. It also requires developments to provide safe access and egress during flood, thus enabling emergency operations, if any required- supporting the SEA objective.	
Soils	0					No direct relation to this SA objective.	
CO ₂ emissions	0					No direct relation to this SA objective.	
'Climate change proof'	0					No direct relation to this SA objective.	
Air quality	0					No direct relation to this SA objective.	
Use of brownfield land	0					No direct relation to this SA objective.	
Resource efficiency	0					No direct relation to this SA objective.	
Historic & cultural assets	+	M T	M	L	T	Policy is supportive of protecting the historic and visual features of the canal.	
Landscape and townscape	+	M T	M	L	T	Policy is supportive of protecting the historic and visual features of the canal.	
Health	0					No direct relation to this SA objective.	
Sustainable development patterns & accessibility	0					Although indirect implication in terms of accessibility can be identified, no direct relation found to this SA objective.	
Equity & social exclusion	0					No direct relation to this SA objective.	
Good quality housing	0					No direct relation to this SA objective.	
Community identity & participation	0					No direct relation to this SA objective.	
Crime	0					No direct relation to this SA objective.	
Sustainable prosperity & growth	0					No direct relation to this SA objective.	
Revitalise town centres	0					No direct relation to this SA objective.	

