**Appendix F: SA Objectives Compatibility Testing Matrix and Commentary** 

	SA O	biecti	ves (	Comp	atibil	lity Te	estino	a Mat	rix –	Outc	omes			
Walsall SAD & AAP SA Objectives														
SA1: Air Quality - Minimise emissions of potentially harmful air pollutants from new development in Walsall and exposure to poor air quality in the parts of Walsall Borough where the national air quality objectives for NO2 are not being met.		+	+	++	+	?	+	++	+	+	+	0	++	0
SA2: Biodiversity and Geodiversity - conserve, protect, enhance and restore Walsall's biodiversity and geodiversity by ensuring that new development does not harm the integrity of European Sites or cause further loss of designated sites or other important wildlife habitats and geological features, and by identifying opportunities for new habitat creation.	+		+	++	+	?	++	++	+	-	?	+	?	+
SA3: Climate Change - minimise Walsall's contribution towards climate change and adapt to the unavoidable effects of climate change on the Borough, by promoting low carbon/ low emission developments and by identifying opportunities to mitigate the anticipated effects on key infrastructure and other important assets.	+	+		++	?	?	++	++	?	+	+	++	?	++
SA4: Communities and Population - support the development of strong, sustainable and inclusive communities in Walsall by developing high quality housing that reflects local housing needs in attractive locations that are accessible to employment and social infrastructure, and by ensuring that other new developments will have a positive effect on the quality of life for local communities.	+	+	+		+	+	++	+	+	+	+	+	++	+
SA5: Cultural Heritage - conserve, protect and enhance Walsall's cultural heritage by encouraging better management of conservation areas and historic parks and gardens, by identifying appropriate, viable and beneficial uses for vacant historic buildings, and by ensuring that new development does not compromise the quality or character of heritage assets and their settings or destroy features or archaeology of national or local importance.	0	?	?	+		?	+	+	++	++	?	0	?	0
SA6: Economy and Centres - promote sustainable, low carbon economic growth and retain businesses and jobs in Walsall by identifying and safeguarding sufficient land for employment and training of the right quality in accessible locations to meet the needs of local businesses and potential investors, and by identifying opportunities for retail, office and leisure development in centres to meet anticipated requirements.	+	+	?	+	?		+	+	?	+	+	+	+	+

SA7: Equality and Diversity - reduce inequality by ensuring that the diverse needs of communities in Walsall are considered when planning housing and other developments to be used by the public, by ensuring that specific needs are addressed where possible, by supporting development that would help reduce poverty and social and economic deprivation, and by improving access to key services and facilities.	+	+	+	++	+	+		++	+	+	+	+	++	+
SA8: Health and Wellbeing - improve the health and well-being of Walsall residents and address health inequalities by ensuring that new development supports healthy lifestyles and wellbeing and does not present unacceptable risks to health, and by ensuring that health and social care facilities are accessible to those they are meant to serve.	++	++	++	++	++	+	++		++	+	+	++	++	++
SA9: Landscape and Townscape - conserve, protect and enhance the landscape and townscape by developing an environmental infrastructure network for Walsall that protects valued areas and provides opportunities to improve areas of lesser quality, and by ensuring that new development is well designed, of a type and scale appropriate to its surroundings, and respects the character of buildings, spaces and other features where they contribute positively to the environment.	+	++	+	++	++	++	+	+			+	++	+	++
SA10: Material Resources - use Walsall's material resources prudently and efficiently and in ways that will protect the environment and human health, by safeguarding mineral resources and mineral and waste infrastructure, by addressing identified mineral supply requirements, and by supporting proposals likely to reduce waste and provide the infrastructure needed to manage unavoidable waste arising in Walsall in ways that will make optimum use of resources and divert as much as possible away from landfill.	+	-	+	?	0	+	?	+			++		+	+
SA11: Renewable and Low Carbon Energy - reduce Walsall's reliance on non-renewable, carbon based energy sources, by minimising energy consumption, by increasing the capacity available to generate energy and fuel from renewable and low carbon sources, and by delivering more affordable, secure and reliable supplies of energy to local communities and businesses.	+	?	++	+	?	+	+	+	?	++		0	+	0
SA12: Soil and Ground Conditions - maintain and improve the quality of Walsall's soils and land, by encouraging development that uses land and buildings efficiently or brings previously developed and derelict land back into beneficial use, and by ensuring that new development deals with existing contamination and geotechnical problems and does not exacerbate existing problems or cause such problems on land not already affected.	0	?	+	+	?	++	+	+	?	•	0		+	++

SA13: Transport and Accessibility - deliver the transport infrastructure required to improve connectivity, reduce congestion and support economic growth in Walsall, reduce the impacts of transport on the environment and on the amenity and well-being of local communities, and ensure that new employment and social infrastructure is accessible to local people by a choice of transport modes, and encourages them to make smarter and healthier transport choices.	++	?	++	++	?	++	++	++	?	+	+	+		?
SA14: Water Environment - Conserve and protect Walsall's water resources, maintain water quality and reduce the risk of flooding, by minimising water consumption, by avoiding development in areas where water resources are present or areas at risk of flooding, by ensuring that new development will not have adverse impacts on hydrology and that any waste water generated can be managed in ways that minimise the risk of flooding and pollution of surface and groundwater.	0	++	++	++	+	++	++	++	++	+	++	++	++	

Key to the Objectives Testing Matrix Outcomes								
Likely strong compatibility	++							
Likely compatibility	+							
Relationship likely to be neutral	0							
Likely incompatibility	-							
Likely strong incompatibility								
Compatibility uncertain	?							

## **SA Objectives Compatibility Testing - Commentary**

SA Objective 1 is particularly compatible with SA Objectives 4, 7, 8 and 13, to create better environmental conditions for local communities and improve health and well-being, particularly in areas of deprivation, and to reduce emissions from transport. It will also be compatible with SA Objectives 10 and 11 to optimise use of material resources and energy, for example, managing waste in ways that does not cause unacceptable environmental harm (e.g. from air pollution). The objective to minimise emissions of harmful pollutants is also likely to achieve reductions of CO<sub>2</sub>, thereby indirectly supporting SA Objective 3 towards climate change mitigation. There is also compatibility with SA Objectives 2, 5 and 9 to conserve and enhance biodiversity, cultural heritage, townscape and landscape, as the objective is likely to create better conditions for local communities and improve health and well-being, particularly in areas of deprivation, and to reduce emissions from transport. It will also be compatible with SA Objectives 10 and 11 to optimise use of material resources and energy, for example, managing waste in ways that does not cause unacceptable environmental harm (e.g. from air pollution). The objective to minimise emissions of harmful pollutants is also likely to achieve reductions of CO<sub>2</sub>, thereby indirectly supporting SA Objective 3 towards climate change mitigation. There is also compatibility with SA Objectives 2, 5 and 9 to conserve and enhance biodiversity, cultural heritage, townscape and landscape, as the objective is likely to create better conditions for transport. It will also be compatible with SA Objective 3 to achieve reductions of CO<sub>2</sub>, thereby indirectly supporting SA Objective 3 towards climate change mitigation. There is also compatibility with SA Objective 9 and 9 to conserve and enhance better conditions for transport. It will also be compatible environmental and pollutions.

**SA2:** Biodiversity and Geodiversity - conserve, protect, enhance and restore Walsall's biodiversity and geodiversity by ensuring that new development does not harm the integrity of European Sites or cause further loss of designated sites or other important wildlife habitats and geological features, and by identifying opportunities for new habitat creation.

SA Objective 2 is particularly compatible with SA Objectives 1, 5, 9, 12 and 14 to conserve and enhance cultural heritage and townscape and landscape character and to improve air, soil and water quality. It will also be compatible with SA Objectives 4, 7 and 8 to improve the health, wellbeing and quality of life for local communities, particularly in areas of deprivation. Compatibility with SA Objectives 6 and 13 is less certain - while the objective to improve biodiversity is also likely to improve the overall attractiveness of the area and encourage development of greenways for walking and cycling, it may also restrict economic development and transport infrastructure improvements. Compatibility with SA Objective 11 is also uncertain, as the objective to avoid further loss of designated sites may limit the scope to identify areas suitable for renewable energy infrastructure, though this is not necessarily the case. However, there is conflict with SA Objective 10, which seeks to address identified mineral supply requirements, because if Objective 9 was applied rigidly, mineral extraction would be ruled out where it would cause loss or harm to designated sites.

**SA3:** Climate Change - minimise Walsall's contribution towards climate change and adapt to the unavoidable effects of climate change on the Borough, by promoting low carbon/ low emission developments and by identifying opportunities to mitigate the anticipated effects on key infrastructure and other important assets.

SA Objective 3 is particularly compatible with SA Objectives 1, 3, 4, 8, 11 and 14 to improve air quality, generate more energy from renewable and low carbon sources, minimise the risk of unavoidable climate change effects such as drought and flooding, and improve the health, safety and wellbeing of local communities. It will also be compatible with SA Objective 10 to optimise use of material resources, as climate change mitigation involves minimising harmful emissions from waste management. It is also likely to complement SA Objectives 2 and 14, by helping biodiversity to adapt to unavoidable climate change effects as far as possible, and by minimising the risks of soil erosion. Compatibility with SA Objectives 6 and 13 is less certain - while mitigation is likely to help to improve the resilience of businesses and transport infrastructure to the unavoidable effects of climate change, the costs of implementing this and of putting into place mitigation measures may inhibit economic growth and investment in infrastructure. It is also uncertain how the objective towards adaptation would affect SA Objectives 5 and 9, as this may involve changes to the character of urban green spaces and the setting of heritage assets.

**SA4:** Communities and Population - support the development of strong, sustainable and inclusive communities in Walsall by developing high quality housing that reflects local housing needs in attractive locations that are accessible to employment and social infrastructure, and by ensuring that other new developments will have a positive effect on the quality of life for local communities.

SA Objective 4 is compatible with all other SA objectives. The objective to create sustainable communities means providing new housing and other accommodation that is inclusive, caters for the diverse needs of all members of society, and is accessible to areas of employment and shopping centres by a choice of transport modes. This allows people to make smarter and healthier transport choices, thereby supporting SA Objectives 6, 7, 8 and 13. The objective also provides opportunities to enhance biodiversity, geodiversity, cultural heritage and the landscape (where relevant), minimise emissions of carbon dioxide and harmful pollutants, minimise use of energy, water and other natural resources, address any existing geotechnical problems and risks from flooding, and incorporate measures to adapt to unavoidable climate change effects, in line with SA Objectives 1, 2, 3, 5, 9, 10, 11, 12 and 14.

**SA5: Cultural Heritage** - conserve, protect and enhance Walsall's cultural heritage by encouraging better management of conservation areas and historic parks and gardens, by identifying appropriate viable and beneficial uses for vacant historic buildings, and by ensuring that new development does not compromise the quality or character of heritage assets and their settings or destroy features or archaeology of national or local importance.

SA Objective 5 is particularly compatible with SA objectives 4, 7, 8, 9 and 10 towards communities, health and wellbeing and landscape and material resources. For example, it will support objectives to improve quality of life for local communities, particularly where improvements take place in areas of deprivation. It is also likely to support objectives to conserving landscape and townscape character and material resources through re-use of existing buildings and structures. Compatibility with SA Objectives 1, 12 and 14 is likely to be neutral overall - any potential harmful effects on air quality, soils or water bodies (e.g. from archaeological excavation or landscape enhancement) are likely to be short-term and temporary. Compatibility with SA Objectives 2, 3, 6, 11 and 13 is less certain, because it may sometimes be necessary to compromise on those objectives to avoid loss or harm to features that contribute to the historic and cultural significance of heritage assets, but conserving historic assets can also be complementary, for example, it can stimulate economic investment and help minimise the consumption of energy to produce building materials and the need to transport them, and thereby minimise the "carbon footprint" of new development.

**SA6:** Economy and Centres - promote sustainable, low carbon economic growth and retain businesses and jobs in Walsall by identifying and safeguarding sufficient land for employment and training of the right quality in accessible locations to meet the needs of local businesses and potential investors, and by identifying opportunities for retail, office and leisure development in centres to meet anticipated requirements.

SA Objective 6 is compatible with SA Objectives 1, 3, 4, 7, 8, 10, 11, 12, 13 and 14, as it embraces the need for economic growth to be sustainable and low carbon, the need to improve access to jobs and services for local communities, and the need to improve the quality of employment land. While there is some uncertainty about the extent to which the objective of sustainable, low carbon economic growth can be realised, the objective itself is sound and compatible with the others listed above, and the options will be tested against it. The relationship with SA Objectives 2, 5 and 9 is uncertain, because the objective to provide sufficient employment land may mean considering low quality greenfield land if insufficient suitable previously-developed land can be identified. This could conflict with objectives to conserve biodiversity, geodiversity, heritage assets and landscape areas, but it is at present uncertain whether the objectives are incompatible.

**SA7:** Equality and Diversity - reduce inequality by ensuring that the diverse needs of communities in Walsall are considered when planning housing and other developments to be used by the public, by ensuring that specific needs are addressed where possible, by supporting development that would help reduce poverty and social and economic deprivation, and by improving access to key services and facilities.

SA Objective 7 is compatible with all other SA objectives. It is particularly compatible with SA Objectives 4, 8 and 13, to create sustainable communities, reduce health inequalities and improve access to employment areas and other key services and facilities. It is also compatible with Objectives 1, 2, 3, 5, 6, 9, 10, 11, 12 and 14 towards economic growth, investment in essential infrastructure, and environmental enhancement and protection, such as improving air quality, conserving and enhancing biodiversity, geodiversity, cultural heritage and landscape, improving resilience to climate change effects, remediation of derelict land, addressing environmental and health effects of mineral and waste development, improving access to affordable energy, managing flood risk and protecting water quality.

**SA8:** Health and Wellbeing - improve the health and well-being of Walsall residents and address health inequalities by ensuring that new development supports healthy lifestyles and wellbeing and does not present unacceptable risks to health, and by ensuring that health and social care facilities are accessible to those they are meant to serve.

SA Objective 8 is compatible with all other SA objectives. It is particularly compatible with SA Objectives 1, 2, 3, 4, 5, 7, 9, 11 and 14 to improve air quality and prevent/ reduce pollution of air, soil and water, to create sustainable communities, to reduce inequality, to improve overall environmental quality, and to promote more active transport modes. It will also be compatible with other objectives, for example, it will benefit economic objectives by improving the health of the local workforce, and ensuring that new development does not affect health is also consistent with the objectives towards sustainable economic growth, use of material resources in ways that protect the environment and health, and improving access to affordable sources of energy.

**SA9:** Landscape and Townscape - conserve, protect and enhance the landscape and townscape by developing an environmental infrastructure network for Walsall that protects valued areas and provides opportunities to improve areas of lesser quality, and by ensuring that new development is well designed, of a type and scale appropriate to its surroundings, and respects the character of buildings, spaces and other features where they contribute positively to the environment.

SA Objective 9 is particularly compatible with SA Objectives 2, 4, 5, 6, 11 and 14, to conserve biodiversity, geodiversity, historic assets and cultural heritage, remediate derelict land and improve soil and water quality, improve quality of life for local communities, and create the conditions likely to attract economic investment. It will also be compatible with SA Objectives 7 and 8 to improve health and wellbeing, and reduce inequality, as it is aiming to enhance degraded land, much of which is concentrated in areas of poverty and deprivation. In addition, it will support the retention of existing buildings and features, and is therefore complementary towards SA Objective 10 to use material resources prudently. The objective to create an environmental infrastructure network is also likely to improve connectivity and contribute towards walking and cycling networks, thereby supporting SA Objective 13. However, there is conflict with SA Objective 10, which seeks to address identified mineral supply requirements, because if Objective 9 was applied rigidly, mineral extraction would be ruled out in areas of local landscape value.

**SA10: Material Resources** - use Walsall's material resources prudently and efficiently and in ways that will protect the environment and human health, by safeguarding mineral resources and mineral and waste infrastructure, by addressing identified mineral supply requirements, and by supporting proposals likely to reduce waste and provide the infrastructure needed to manage unavoidable waste arising in Walsall in ways that will make optimum use of resources and divert as much as possible away from landfill.

Objective 10 is particularly compatible with SA Objective 11 to generate energy from renewable sources, which can include waste. It is also likely to be compatible with Objectives 1, 3, 8 and 14 as it advocates using material resources in ways that will not harm the environment or human health. Exploiting material resources wisely will also ensure that there will be sufficient raw materials to support economic growth and that the distance materials need to travel is minimised, in line with SA Objectives 6 and 13. Compatibility with SA Objectives 4 and 7 is uncertain, as while there is potential for mineral and waste development to harm the amenity of local communities, it is usually feasible to control the effects through other regulatory regimes and through mitigation. The relationship with SA Objectives 5 is probably neutral overall, as while the objective supports re-use existing buildings materials, mineral extraction can cause loss or harm to archaeology. As the objective embraces the need for mineral extraction, conflicts with SA Objectives 2, 9 and 10 to conserve biodiversity and landscape and improve soils and derelict land are inevitable. While harmful effects can be controlled to an extent through other regulatory regimes and in the long-term can be mitigated through restoration, some harmful effects are unavoidable.

SA11: Renewable and Low Carbon Energy - reduce Walsall's reliance on non-renewable, carbon based energy sources, by minimising energy consumption, by increasing the capacity available to generate energy and fuel from renewable and low carbon sources, and by delivering more affordable, secure and reliable supplies of energy to local communities and businesses.	SA Objective 11 is particularly compatible with SA Objectives 3 and 10, as the objectives of conserving energy and making greater use of energy from renewable and low emission sources is likely to reduce emissions of carbon dioxide and optimise use of material resources, including waste. The objective also supports SA Objectives 1, 4, 6, 7, 8, and 13, as it can help to reduce emissions of harmful pollutants from energy consumption and production, improve access to affordable energy and support production of low emission fuels. The relationship to SA Objectives 12 and 14 is likely to be neutral overall, as hydropower is not likely to be a viable option in Walsall and any effects on soils from ground source heating systems will be localised and limited. Compatibility with SA Objectives 2, 5 and 9 is uncertain – while the visual impacts of some renewable energy generating systems (such as wind turbines and infrastructure fixed to buildings), can conflict with objectives to conserve biodiversity, cultural heritage and landscape quality, this is not always the case, and effective mitigation/ compromise solutions are often feasible.
SA12: Soil and Ground Conditions - maintain and improve the quality of Walsall's soils and land, by encouraging development that uses land and buildings efficiently or brings previously developed and derelict land back into beneficial use, and by ensuring that new development deals with existing contamination and geotechnical problems and does not exacerbate existing problems or cause such problems on land not already affected.	SA Objective 12 is particularly compatible with SA Objectives 6 and 14, as the objective of bringing derelict land back into use will contribute towards employment land supply and the objective of avoiding further problems addresses the need to prevent pollutants entering water bodies. The objective will also be compatible with SA Objectives 4, 7, 8 and 13, as derelict land is concentrated in areas of deprivation, so bringing such land into beneficial use is likely to have positive effects on residential areas and the health and wellbeing of local communities living there. The relationship to SA Objectives 1 and 11 is likely to be neutral, as the objective is unlikely to affect air quality or energy other than in a very limited way (e.g. providing opportunities to install ground source heating systems). Compatibility with SA Objectives 2, 3, 5 and 9 is uncertain – while the objective of bringing derelict land back into use can provide opportunities to enhance biodiversity, geodiversity, cultural heritage and landscape and for climate change mitigation, it can also lead to removal of features of value present on the land, and there is also no guarantee that climate change mitigation measures will be included. There is also potential conflict with the objective of preventing further geotechnical problems and SA Objective 10, which seeks to address identified mineral supply requirements, because if Objective 12 was applied rigidly, no mineral extraction would be allowed.
SA13: Transport and Accessibility - deliver the transport infrastructure required to improve connectivity, reduce congestion and support economic growth in Walsall, reduce the impacts of transport on the environment and on the amenity and well-being of local communities, and ensure that new employment and social infrastructure is accessible to local people by a choice of transport modes, and encourages them to make smarter and healthier transport choices.	SA Objective 13 is particularly compatible with SA Objectives 1, 3, 4, 6, 7 and 8, as providing essential transport infrastructure will benefit the economy and business growth, and making facilities more accessible will also benefit local communities, particularly those in deprived areas where many people do not have access to private transport. Encouraging people to make smarter, healthier transport choices and to use low emission transport modes will also have positive effects on air quality, climate change mitigation and health. The objective is also likely to be compatible with SA Objectives 10, 11 and 12. Improvements to transport linkages will provide further stimulus to encourage remediation of derelict land, and encouraging use of low emission transport may stimulate production of low emission fuels, and may encourage bulky goods such as waste and minerals to be transported by rail rather than by road. Impacts on SA Objectives 2, 5, 9 and 14 are less certain, as transport infrastructure projects have the potential to have positive or negative effects on the built and natural environment, depending on how they are designed, for example, greenways can provide opportunities for biodiversity and landscape enhancement, improved access to heritage assets, and better management of rivers and canals, whereas new road and rail infrastructure may cause harm.
SA14: Water Environment - Conserve and protect Walsall's water resources, maintain water quality and reduce the risk of flooding, by minimising water consumption, by avoiding development in areas where water resources are present or areas at risk of flooding, by ensuring that new development will not have adverse impacts on hydrology and that any waste water generated can be managed in ways that minimise the risk of flooding and pollution of surface and groundwater.	SA Objective 14 is compatible with most SA Objectives, particularly Objectives 2, 3, 4, 6, 7, 8, 9, 11, 12 and 13, because maintaining water quality and managing flood risk also means protecting wildlife, people, soils and landscapes from the potential harm caused by pollution, flooding and erosion, will help to maintain supplies of drinking water and water required by businesses in the future, and will contribute towards climate change adaptation, such as managing potential risks to businesses, energy and transport infrastructure from flooding. It is also compatible with SA Objectives 5 and 10, as effective management of water bodies such as rivers and canals is likely to benefit cultural heritage and will help to make mineral working safe. The relationship with SA Objective 1 is likely to be neutral as managing the water environment is unlikely to have any significant effect on air quality.