



City Centre and University Area Action Plan 2006 - 2021

Sustainability Appraisal

August 2009



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Executive Summary

Planning Authorities produce a Sustainability Appraisal (SA) alongside plans that form part of a Local Development Framework (LDF). The City Centre & University Area Action Plan (AAP) is such a plan.

Sustainability Appraisal uses a range of sustainability objectives and indicators to test whether the plans, policies and proposals are the best possible ones for delivering sustainable development. SA is used as a yardstick against which the social, environmental and economic effects of the plan are tested.

This report documents the results from the appraisal of the pre submission draft of the City Centre and University AAP. The AAP has developed through a process that has included Issues and Options (March 2005), and Issues and Preferred Options (November 2008) consultation documents. Each of these documents has also been subject to a Sustainability Appraisal.

This appraisal recognises and supports the very significant contribution that the Area Action Plan has to play in the sustainable development of the City Centre, and the wider Plymouth sub region. The report finds that since the City Centre and University AAP Issues and Preferred Options Consultation (November 2008) the plans for the City Centre have improved in the following key areas:

- Specific proposals that positively respond to the climate change agenda by enabling the delivery of a Low Carbon Energy network.
- Specific recognition of measures needed to address flood risk around Western Approach and Colin Campbell Court. Additional work is required to deliver a Surface Water Management Plan to inform the delivery of these measures.
- Proposals around North Cross now include measures aimed at reducing potential adverse impacts of development upon air quality.
- Significant support to improve pedestrian & cycle movement around the City Centre.
- Encouragement to local enterprise and markets for goods and service through policy support for the West End's role as a seedbed for small business, and as a focus for independent retailers.

The appraisal identifies that implementing the plan is likely to generate the following potentially significant adverse impacts, and recommends measures for monitoring these:

- Significant increases in the number of car-based trips to the City Centre
- Subsequent increases in the levels of carbon emissions
- Significant reductions in air quality around the Strategic Road Network.

The appraisal also makes a number of recommendations for further work that would help ensure all the AAP's potential beneficial effects are maximised in the process of the plan being delivered.

Chapter 1: Introduction

1.1 Planning Authorities are required to produce a Sustainability Appraisal (SA), alongside plans that form part of a Local Development Framework (LDF). Plymouth's City Centre and University Area Action Plan (AAP) is such a plan. This document is the SA report to accompany the August 2009 Pre Submission consultation document that has been produced as part of the preparation of that Area Action Plan.

What is Sustainability Appraisal?

1.2 Sustainability Appraisal uses a range of sustainability objectives and indicators to test whether the plans, policies and proposals are the best possible ones for delivering sustainable development. Sustainability Appraisal is a tool that is used to ensure that the full range of environmental, social and economic effects of the LDF are considered during a plans formulation. It seeks to ask the following questions about these effects:

- Could these effects be of special significance?
- Are there ways of reducing or mitigating adverse effects?
- Can any beneficial effects be further enhanced by positive planning?

1.3 The SA plays an important role in improving the quality of the LDF by ensuring that it seeks to deliver national and local objectives for sustainable development.

1.4 Sustainability Appraisal is a mandatory requirement of the Planning and Compulsory Purchase Act 2004 for the production of all DPD's. This SA will also fulfil the requirement for the AAP to be assessed in line with the Strategic Environmental Assessment (SEA) Directive (2001/42/EC). How the various elements of this Directive are complied with is summarised in Appendix 1.

1.5 Whilst SA is an iterative process, a key output is a Sustainability Appraisal report which describes what elements of the plan have been appraised and how, and the likely significant sustainability effects of the implementation of the plan.

1.6 This document is published along with the AAP consultation document, to inform that process. It is also open to comment, as part of this consultation process.

What is the City Centre Area Action Plan?

1.7 Area Action Plans are the part of the LDF that provide the planning framework for areas where significant change or conservation is needed. They are central to the delivery of Plymouth's LDF in that they set the policies and proposals that direct development to the city's waterfront regeneration areas, as well as to the major opportunity sites located along Plymouth's Eastern and Northern Corridors.

1.8 The City Council's vision for the City Centre and University area is to create a lively and vibrant mixed use regional centre which provides high quality regional shopping, together with a range of facilities for living, working and recreation - both by day and night.

1.9 The City Centre and University Area Action Plan will set out land use policies and proposals to create a real 'downtown' centre that offers residents and visitors a 24-hour lifestyle, with specialised shops, restaurants and pubs alongside a choice of entertainment and culture; as well as improving connections with adjacent areas.

1.10 The Council anticipates there will be 4 key stages in the preparation of the City Centre & University AAP:

- Issues and Options (published March 2005)
- Issues and Preferred Options Consultation Document (published November 2008)
- Pre Submission Consultation Document (August 2009)
- Submission, Public Examination & Adoption (by November 2010)

1.11 Each of these consultation stages has been subject to a Sustainability Appraisal. The results from these appraisals have been used to improve the plan.

What does Sustainability Appraisal involve?

1.12 Plymouth City Council's SA follows the 5 stages set out in ODPM's (2005) guidance: 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents' (ODPM, 2005). These are:

- Stage A: Scoping - Setting the context and objectives, establishing the baseline and deciding on the scope of the appraisal
- Stage B: Appraisal & Options - Developing and refining options and assessing effects
- Stage C: Reporting - Preparing the Sustainability Appraisal Report
- Stage D: Consulting on the draft plan and the Sustainability Appraisal Report
- Stage E: Monitoring the significant effects of implementing the DPD.

1.13 The appraisals are undertaken using an appraisal framework developed and set out in the Sustainability Appraisal Scoping Report (March 2008). The SA framework sets out the sustainability objectives and appraisal criteria that will be used to test whether the options being explored in the City Centre & University AAP, are the best possible ones for delivering sustainable development. The full SA Framework is included in Appendix 2. The SA objectives and appraisal criteria are summarised below in Table 1.

1.14 This appraisal was undertaken alongside the writing of the Pre Submission Consultation document, with a view to tracking the direction of travel against the SA objectives and make recommendations that could be used to improve the Pre Submission Draft. It has been completed in-house by officers within Plymouth City Council's Planning Service.

High Level SA Objective	Appraisal Criteria: Does the policy or proposal?
Improve health, well being, and community safety	Improve health & support healthy lifestyles
	Reduce health inequalities
	Reduce anti social behaviour, crime and fear of crime
Support communities & neighbourhoods that meet people's needs	Help provide a suitable mix of housing that is available & affordable for everyone
	Support the delivery of a full range of community facilities
	Give everyone access to local opportunities for learning, training, skills, knowledge & culture
	Provide a range of opportunities for people to work locally
	Provide access to open space / greenspace for sports, play & informal recreation
	Help provide opportunities for participation in local action and decision making
A diverse and thriving economy that meets peoples needs	Support business and enterprise that will improve the quantity and quality of jobs within the city.
	Support the development of a skilled workforce and increase levels of economic participation.
	Encourage local enterprise and support markets for local labour, goods & services.
	Reduce the vulnerability of the economy to climate change
A well connected city that meets people's need for access to places and services with least damage to communities and the environment	Reduce the need desire to travel by car or air.
	Help everyone to access basic services easily safely and affordably
	Make public transport, cycling & walking easier and more attractive
Maintain & enhance the quality of the city's built & natural environment	Avoid areas of high flood risk and reduce the vulnerability to future flooding
	Maintain and enhance historical buildings, structures, monuments and remains of acknowledged importance
	Provide for a high quality urban environment with highest possible standards of urban design
	Protect & enhance biological & geological diversity
	Protect and enhance local landscape & green space
Minimise consumption of natural resources	Reduce non renewable energy consumption and green house gas emissions
	Reduce water consumption
	Minimise consumption and extraction of minerals
	Reduce waste
	Minimise land, water, air and light pollution

Table 1: The Plymouth LDF SA Framework: Objectives & Appraisal Criteria

1.15 The Council published its revised Sustainability Appraisal Scoping Report (Stage A) in March 2008. This work was amplified in Chapter 2 of the City Centre AAP Sustainability Appraisal Issues and Preferred Options Report, which scoped out the key sustainability issues specific to the City Centre.

1.16 Stage B of the SA process was undertaken in the City Centre AAP Sustainability Appraisal Issues and Preferred Options Report (published November 2008).

Content and Purpose of this Report

1.17 The purpose of this document is to consider:

- How the recommendations from the City Centre AAP Sustainability Appraisal Issues and Preferred Options Report have been incorporated into the Pre Submission version
- Identify and appraise any **significant** changes to the strategy within the AAP since the Issues & Preferred Options Report
- Identify measures for monitoring for any significant effects identified by the SA.

1.18 To achieve this the SA report will follow the following structure:

- Summary of conclusions from Issues & Preferred Options SA
- Summary of key changes since the Issues and Preferred Options consultation document
- Appraisal of each AAP Objective, Policy or Proposal summarised in the SA matrix
- Analysis of key findings
- Recommendations for monitoring.

Chapter 2: Results of Previous Appraisals

2.1 Sustainability Appraisal is a process that tracks the development of spatial plans. Some of the ideas within the City Centre AAP have been subject to SA at two earlier stages:

- Issues and Options (published March 2005)
- Issues and Preferred Options Consultation Document (published November 2008).

2.2 This chapter seeks to provide a short summary of the Sustainability Appraisal Report on City Centre AAP Issues & Preferred Options Consultation Document.

2.3 The SA recognised that the City Centre and University Area Action Plan has a significant role to play in the sustainable development of the City Centre, and the wider Plymouth sub region.

2.4 The SA of the Issues & Preferred Options Document focused on testing the AAP's Objectives, and 'Options' against the SA Framework. The latter of these 2 stages was broken down into an appraisal of the potential strategic options along which the AAP could develop, followed by analysis of the preferred 'key ingredients'.

Results from Issues and Preferred Options - Testing the AAP's Objectives:

2.5 It was noted that the SA objectives and draft AAP objectives, both seek to enhance and improve the City Centre, and are therefore broadly compatible, but that the implementation of all of the elements would inevitably create some potential tensions: The key points being:

- The objective of creating a stronger and more vibrant economy in the City Centre would be very likely to increase the use of natural resources, particularly energy, and manufactured materials. It would also increase the demand for transport services of all types. The AAP must take account of this potential outcome by ensuring that all available and practical means are employed to reduce waste, increase resource efficiency, and uptake of renewable energy solutions.
- Tension between conservation of historic assets and the need for redevelopment to achieve increased diversity and intensification, as well as meeting current shopping & service infrastructure requirements.
- The SA objectives aimed at encouraging the minimisation of demand and the promotion of sustainable transport modes could directly conflict with the reintroduction of vehicles to existing car-free zones. The presence of traffic and parking in shopping and employment areas will discourage the take-up of public transport and discourage walking and cycling for those purposes.
- There is also tension within the competing alternative sustainable modes, in that greater pedestrian priority can impact on public transport journey times, and

cyclists and pedestrians are sometimes uncomfortable fellow travellers in busier thoroughfares.

- The selective reintroduction of traffic seeks, in part, to enhance street safety through increased activity, particularly during the evening. However, it also has the potential to reduce road safety, damage air quality and lead to an increase in vehicle-related crime.

2.6 The SA recommended that these issues be considered in the refinement of strategic options and the development of policy / proposals.

Results from Issues and Preferred Options - Testing the AAP's Options

2.7 The SA explored the pros & cons of a number of the strategic options for the future development of the Area Action Plan. This analysis results in the following recommendations:

- The approach to ensuring sustainable communities is a cross cutting theme throughout Plymouth's LDF. This should be strengthened and widened to include the principle of environmental limits. For the City Centre this is likely to mean a strategy that gives more emphasis to policy and proposals that promote low carbon approaches, and address the growing air quality issues.
- Improvements to essential drainage infrastructure may be required for development proposals around the junction of Union St and Western Approach to ensure regeneration is future proofed against flood hazards caused by tide locking.
- Priority heritage assets need to be conserved on a clear understanding of their merit, and their conservation debated in the light of a wider understanding of the commercial pressures that will be key in providing local services for Plymouth's sustainable growth.
- The AAP must be informed by a vision and strategy for sustainable transport that provides a clear statement as to what those options are, and that matches the timescale and ambitions being expressed for regeneration and redevelopment. This work must be progressed as a priority.
- Low Carbon options should be given significantly more consideration within the strategic direction of the AAP. Reduction of carbon emissions in line with Plymouth's Local Area Agreement target should be included as an objective for the plan. The AAP can then maximise its potential as a vehicle for delivering against this target by focusing on interventions around the proposed transport strategy for the City Centre, and an integrated approach to low carbon energy solutions.

2.8 The SA also considered each of the Preferred Key Ingredients identified in Part 5 of the City Centre & University AAP Issues & Preferred Options Consultation document, and made the following recommendations:

- Detail of delivery of quarters plan needs to hold strongly to the sustainable communities 'golden thread' and the importance of maintaining a mix of uses within the quarters to avoid impacts of land use zoning. Need to ensure sufficient

emphasis placed in relevant zones for unit sizes that further the enterprise culture within the city and support business start up.

- Evolution of policies and proposals around large retail led redevelopment need to include strong commitments to Local Labour Agreements; the integration of low carbon energy solutions, and the consideration of the broad mix of uses needed for the proposed new residential community.
- The development of a policy approach that requires the retrofit of energy efficiency and renewable or low carbon energy solutions as part of renovation / refurbishment of key heritage assets.
- Sustainable movement principles need to be rebalanced in terms of a stronger vision and objectives for pedestrian, cycle and public transport movements.
- There is a need to integrate sustainable construction benchmarks as a key criteria for assessing delivery of quality design within the City Centre.

Chapter 3: Sustainability Appraisal of the City Centre AAP

3.1 Sustainability Appraisal is a tool that is used to ensure the full range of environmental, social and economic effects of the LDF are considered during a plans **formulation**. The strategic options, and key ingredients for formulating the plan have already been assessed at the Issues & Preferred Options stage (see summary in chapter 2) . In this respect much of the work of the appraisal is already complete.

3.2 The purpose of this chapter is to finalise the SA by:

- Identifying and Appraising any significant changes to the AAP since the Issues and Preferred Options Consultation Document
- Assessing each of the AAP's Objectives, Policies or Proposals performance against the SA Framework. These are presented in the form of a Sustainability Appraisal Matrix, followed by an analysis of the key findings.

Appraising Changes since Issues and Preferred Options Consultation Document

3.3 Since the Issues & Preferred Options (I&PO) consultation (November 2008) the City Centre AAP has developed into a more detailed document, and there is a need to identify any **significant** changes to the strategy, and to consider the effects these changes may bring. These are presented below as:

- Changes to AAP Objectives
- Changes from Key Ingredients to the draft AAP's Policies and Proposals.

Changes to AAP Objectives

3.4 The wording and structure of the objectives has significantly changed from that set out in the Issues & Options document and the Adopted LDF Core Strategy Vision for the City Centre. But the general themes remain very similar with the following notable changes:

- Greater emphasis and clarity on the key role of Plymouth City Centre in supporting service provision & economic growth within the south west.
- Specific focus on the need for low carbon solutions towards energy supply.
- A more balanced objective around 'movement' that provides greater recognition for public transport, pedestrians & cyclists.
- Greater emphasis on the value of the City Centre's historic assets.
- Specific recognition of the key role the West End has to play in supporting independent retailing, enterprise and sustaining supply and demand for local goods and services.

3.5 All of these changes perform strongly against SA objectives and appraisal criteria, and are positive responses to previous SA recommendations.

Changes from Issues and Preferred Options Key Ingredients to draft AAP Policies and Proposals

3.6 The strategic options and key ingredients outlined in the Issues and Preferred Options Consultation Document have now been developed into 19 policies and proposals. These contain significant amounts of additional detailed policy wording, and greater clarity on delivery, but the broad content remains consistent with that tabled at the I&PO stage.

3.7 The only notable exception in terms of broad content is the proposal CC05 Enabling Low Carbon Development, which is also a positive response to previous appraisal recommendations.

Appraisal of each Policy or Proposal – The Sustainability Appraisal Matrix

3.8 Table 2 overleaf summarises the appraisal of each objective, policy, or proposal contained within the Pre Submission version of the AAP. It documents each ones contribution to the Sustainability Appraisal Objectives and 26 Appraisal Criteria contained within Plymouth’s SA Framework. It grades the contribution of each policy / proposals as:

- Strong Positive Impact
- Positive Impact
- Neutral / No Impact
- Negative Impact
- Strong Negative Impact.

SA Objective	Appraisal Criteria	City Centre AAP Objectives, Policies and Proposals																											
		Regional Destination	Place making in the City Centre					Movement & Accessibility		The West End – the Market and Independent District				Core Retail District			District, North Cross and the Railway Station		The Learning and Culture District		The Leisure and Civic District								
		Strategic Objective 1	Strategic Objective 2	Policy CC01 Historic Environment	Policy CC02 – Royal Parade	Policy CC03: Public Realm	Policy CC04 – Sustainable Neighbourhood	Proposal CC05 – Low Carbon Development	Strategic Objective 3	Policy CC06 Strategic Road Network	Policy CC07: Royal Parade	Strategic Objective 4	Proposal CC08: Colin Campbell Court	Policy CC09 Morley Court / Marwell Court	Policy CC10 Market and Independents District	Strategic Objective 5	Policy CC11: Cornwall Street	Policy CC12: Drake's Circus New George Street	Proposal CC13: Land outside Drake's Circus	Strategic Objective 6	Proposal CC14: North Cross & Railway Station	Policy CC15: The Northern Triangle	Strategic Objective 7	Policy CC16: University of Plymouth Campus	Policy CC17: Plymouth College of Art	Strategic Objective 8	Policy CC18: S of Denny's Cross	Policy CC19: S of Royal Parade, E of Armada Way	
Improve health & well being	Improve health & support healthy																												
	Reduce health inequalities																												
Support communities & neighbourhoods that meet peoples needs	Reduce anti social behaviour																												
	Help provide a suitable mix of housing that is available &																												
	Support the delivery of a full range of community facilities																												
	Give access to local opportunities for learning, training, skills																												
	Provide a range of opportunities to																												
A diverse and thriving economy that meets peoples needs	Provide access to open space / green space for sports play &																												
	Help provide opportunities for participation in local action and																												
	Support business and enterprise that will improve the quantity and																												
	Support the development of a skilled workforce and increase																												
A well connected city that meets peoples needs for access to places and services	Encourage Local Enterprise and support markets for local labour																												
	Reduce the vulnerability of the economy to climate change																												
	Reduce the need / desire to travel																												
Maintain & enhance the quality of the city's built & natural environment	Help everyone to access basic services easily, safely and																												
	Make public transport, cycling and walking easier and more attractive																												
	Avoid areas of high flood risk and reduce the vulnerability to future flooding																												
	Maintain and enhance historical buildings, structures, monuments, and remains of acknowledged																												
Minimise consumption of natural resources	Provide for a high quality urban environment with highest possible																												
	Protect & enhance biological &																												
	Protect & enhance local landscape																												
	Reduce non renewable energy consumption and green house gas																												
	Reduce water consumption																												
Minimise consumption of natural resources	Minimise consumption and																												
	Reduce Waste																												
	Minimise land, water, air and light																												

Key: Each Objective, Policy Or Proposal is scored according to its contribution towards each SA Objective. These scores are represented by the following colour:
■ Strongly Positive ■ Positive ■ Neutral or No impact ■ Negative Effect ■ Strongly Negative Effect

Table 2: City Centre AAP Sustainability Appraisal Matrix

Appraisal of each Policy or Proposal – Analysis of Key Findings

3.9 The sustainability appraisal matrix demonstrates visually, the significant contribution that the Area Action Plan has to play in the sustainable development of the City Centre, and the wider Plymouth sub-region.

3.10 As noted above, the majority of the proposals are strongly rooted in the key ingredients appraised as part of the I&PO appraisal. To avoid repeating analysis provided in the previous report, this section focuses on providing a narrative on:

- How the recommendations from previous appraisals have been integrated into the final policies & proposals
- Exploring why certain proposals continue to make negative contributions to some SA Objectives
- Identify any remaining direct / indirect /cumulative impacts or ‘blind spots’ that should be monitored or addressed through future work.

3.11 This analysis is presented against the headline recommendations from the I&PO appraisal.

Low Carbon Development

3.12 The previous SA recognised that the objective of creating a stronger and more vibrant economy in the City Centre would be very likely to increase the use of natural resources, particularly energy, and that the AAP must take account of this potential outcome by ensuring that all available and practical means are employed to increase resource efficiency, and uptake of renewable energy solutions. It recommended that Low Carbon options should be given significantly more consideration within the strategic direction of the AAP.

3.13 Strategic Objectives 1 and 2 now specifically recognise the importance of delivering a low carbon energy network. The AAP now recognises the need to reduce greenhouse gas emissions as part of a response to climate change, but also to ensure that the City’s inward investment offer is future proofed against the regulatory changes that are being driven by climate change.

3.14 Proposal CC05 Enabling Low Carbon Development provides the detail about how these strategic aspirations will be achieved through the delivery of an area wide Combined Heat & Power and District Heating Network. Proposals for Colin Campbell Court (CC08), Cornwall Street (CC11) and North Cross (CC14) include requirements to host energy centres that will support the delivery of this network.

3.15 The previous SA recognised that there was a tension between the desire to retain built heritage assets and the need to drive down the City Centre’s carbon footprint. This tension is in part addressed by the support given in Policy CC02 Royal Parade Blocks for the retrofit of low carbon or energy efficiency measures. This support is specifically targeted at these blocks because they are the areas with

potential for most change. But it would be beneficial if this principle was applied to delivery of wider historic environment policy (CC01) and the other key areas of heritage interest South of Royal Parade (CC19).

3.16 The SA strongly supports these policy interventions and the SA matrix reflects their positive contribution to the appraisal criteria for *Reducing vulnerability of the economy to climate change* and *Reducing non-renewable energy consumption*. The actions needed to put in place the physical & commercial infrastructure (eg. Energy Service Company) required to deliver proposal CCO5, should be monitored as an indicator of action to mitigate climate change impacts of the APP.

3.17 The previous SA recommended that the AAP should adopt low carbon objectives that embraced transport measures as well as energy supply. The response to this is discussed below under section on Sustainable Transport / Movement

Flood Risk

3.18 Responding to PCC's Strategic Flood Risk Assessment, and previous SA commentary, the proposal for Colin Campbell Court (CC08) makes a positive contribution towards the need to reduce the vulnerability of developments to future flooding.

3.19 The low-lying nature of this site, and the adjoining transport infrastructure means that it is at risk from surface water flooding. It suffers from localised flooding associated with insufficient drainage capacity. The surface water drainage network becomes 'locked' at high tide (ie there is nowhere for the water to drain to), and this problem will be exacerbated by the sea level rise and increased rainfall intensity that is expected with climate change.

3.20 Since the Issues & Preferred Options Consultation document this proposal has been amended to require new development to deliver improvements to this drainage infrastructure so that the level of flood risk can be reduced.

3.21 The level of risk posed by surface water flooding within the City Centre, and elsewhere within Plymouth is still poorly understood. Reducing surface water flood risk at Colin Campbell Court may require off site solutions that would deliver better protection not only for this site but other high risk areas also. A city - wide Surface Water Management Plan is required to identify all the areas of risk, and the measures needed to reduce that risk. Completion of a surface water management plan should be monitored as an indicator of progress toward reducing the City Centre AAP's impacts on flood risk.

Sustainable Transport and Movement

3.22 At the Issues & Preferred Options stage the SA recommended that the movement principles supported by the AAP need to be rebalanced in terms of a stronger vision and objectives for pedestrian, cycle and public transport movements. It identified a lack of a strategy for sustainable transport that matched the ambitions, detail and timescale being expressed for regeneration and redevelopment.

3.23 The SA matrix now shows that over 50% of the AAP's objectives policies or proposals score positively against the appraisal criteria *Making public transport, cycling and walking easier and more attractive*.

3.24 Strategic Objective 3 on Movement & Accessibility now gives a more balanced perspective on 'all movement' rather than just motorised vehicles, and provides greater recognition for public transport, pedestrians & cyclists. Policy such as CC03 Public Realm is positive in that it not only recognises the significance of the City Centre's public realm for pedestrian permeability, but importantly, pro actively addresses the legacy of the pedestrianised City Centre being a no cycling zone.

3.25 Policies and Proposals for Land outside Drake Circus (CC13), North Cross (CC14), Northern Triangle (CC15), University (CC16) and Plymouth College of Art (CC17) all score well against this criteria due to the explicit priority they express for pedestrian and/or cycle movements.

3.26 However many of these are 'easy wins' in that they concentrate on movement **around** the City Centre, and these areas already give a high priority to these modes. The recognition in policy is therefore purely supporting and enhancing the status quo. These policy measures have a place, but must be complimented by the more challenging interventions that pro actively '*reduce the need / desire to travel by car into* the City Centre.

3.27 Strategic Objective 3 and Policy CC06 on the Strategic Road Network begin to do this by endorsing the need to improve access by public transport to the City Centre. The policy for Royal Parade & Exeter St (CC07) and the proposal for North Cross (CC14) both flesh out where improvements could be made to deliver the high quality transport interchanges that will be required. Policy CC06 recognises the need to address the issue of the Strategic Road Network acting as 'concrete collar', by supporting measures that promote improved movements for pedestrian & cyclists across the road, into and out of the surrounding neighbourhoods.

3.28 The above show a positive 'direction of travel' in relation to the AAP's support for sustainable travel, but the ability to deliver the positive benefits of these policies in terms of mode shift are however counteracted by other policy positions. For instance, Policy CC06 requires the vehicular capacity of the Strategic Road Network be preserved or enhanced, and the approach to car parking embodied in the Cornwall Street (CC11) proposal will generate a very substantial net increase in car parking spaces. These measures are recognised in the SA matrix as making a very positive contributions towards the AAP's ability to facilitate the inward investment need to deliver the regeneration and renewal required. They will also help ensure shopper footfall is distributed more evenly around the City Centre, reinforcing other policy support for the viability of the Market & Independent District. But they will weaken two highly successful tools (congestion and availability of parking spaces) for managing the demand for public transport.

3.29 The AAP's policies and proposals are therefore likely to generate significant increases in the number of car-based trips to the City Centre. Policies CC06, CC08, & CC11 are therefore shown as performing poorly against the appraisal criteria *reduce the need / desire to travel by car, reduce non renewable energy consumption and minimise air pollution*. The scale of these impacts should be monitored through data on the City Centres Carbon footprint, air quality, and through data on mode shifts towards public transport, cycling and walking.

Sustainable Neighbourhoods

3.30 At I&PO the appraisal recognised that the delivery of the 'quarters plan' needed to reinforce the sustainable communities 'golden thread' by ensuring an appropriate diversity & balance of uses within each area. This issue is addressed in part through policy CC04, that reinforces the importance of diversifying uses within the City Centre, and by proposals such as Colin Campbell Court (CC08), Morley Court (CC09), & North Cross (CC14).

3.31 Proposals for Colin Campbell Court and Cornwall Street are exempt from the LDF policy requirement to provide 30% affordable housing, and as such perform poorly against the appraisal criteria *'Help provide a suitable mix of housing that is available and affordable for all.'* This policy position is seen as necessary to attract inward investment required to deliver the regeneration of these sites.

3.32 However, it is noted that the AAP highlights the opportunities for residential development on other sites in the City Centre, where the 30% affordable housing requirement will apply, but the total outcomes from this is not made clear. The plan could be improved by making these headline quantum's more explicit.

Environmental Limits

3.33 Previous SA commentary recommended that the AAP's strategy for creating a sustainable neighbourhood in the City Centre needed to expand to include recognition of the environmental limits pertinent to the area. For the City Centre this is a strategy that gives more emphasis to policy/ proposals that promote low carbon approaches, and address the growing air quality issues. The former is covered by commentary above, but Air Quality remains an issue.

3.34 Proposals for North Cross (CC14) and the Northern Triangle (CC15) now specifically recognise the need for the built form in these areas to minimise the 'canyoning' effect of development adjacent to the strategic road network. However this positive recognition of the need for masterplans to bring forward air quality sensitive design, is likely to be offset by the wider increase in car based trips into the City Centre, and the emissions these will generate.

3.35 The cumulative impact of the AAP is likely to result in a reduction in air quality in the City Centre. The location and scale of these impacts will need to be monitored.

Waste and Resource Efficiency

3.36 At I&PO the SA recommended that all practical means be employed to reduce waste to increase resource efficiency. The SA Matrix highlights that the Colin Campbell Court (CC08) and Cornwall Street (CC11) proposals score poorly against two appraisal criteria for minimising consumption of natural resources. This is due to the large levels of demolition and redevelopment that they plan, and the associated construction waste and consumption of minerals. However, as both of these projects will be of a scale sufficient to require compliance with the recent Site Waste Management Plan Regulations, these impacts should be minimised by measures external to the planning system.

3.37 Current & future visitors to the City Centre will generate significant levels of waste, and opportunities for recycling need to be significantly improved. Policy CC03 Public Realm has the potential to contribute more positively to this SA Objective, and it is recommended that the proposed City Centre Public Realm Framework ensures recycling and waste management is recognised as a requirement in the design and layout of all public spaces.

Support for Local Enterprise and Local Labour initiatives

3.38 The I&PO appraisal recommended that larger redevelopment proposals should include commitments to Local Labour Agreements, and that more emphasis was required on unit sizes that would support enterprise culture / business start up. The draft AAP's policy towards the West End is very supportive towards this area's role in supporting smaller, independent retailers and as a seedbed for local businesses. These make a strong contribution to the SA Objective for a diverse and thriving economy and help to compliment the dominance of large retail chains in other areas of the City Centre. It is also positive that the CC11 proposal recognises the need for redevelopment at Cornwall St West to encompass smaller unit sizes.

3.39 Local Labour Agreements are not identified as a requirement on any proposal. This opportunity for supporting local labour initiatives through planning is not specific to the City Centre, and should be considered as part of the review of Plymouth City Council's Planning Obligations Supplementary Planning Document.

Recommendations for Monitoring:

3.40 Plymouth City Council is required to monitor the significant effects of implementing the City Centre & University AAP. Delivery of the plan must be monitored in order to identify at an early stage any unforeseen adverse effects, and to review the scale of the potential significant effects identified in this report. This work is clearly required to enable appropriate remedial action.

3.41 Based on the preceding analysis it is recommended the following potentially significant effects of the plans are monitored and documented as part of the LDF Annual Monitoring Report:

- Carbon emissions from energy use in the City Centre

- Transport movements by different modes in & out of the City Centre, and associated carbon emissions
- Air quality – particularly at Royal Parade & Coburg Street / North Cross
- Delivery of measure to manage surface water flood risk.

Chapter 4: Conclusions

4.1 This report documents the results from the appraisal of the Pre Submission version of the City Centre and University AAP. In general it recognises and supports the significant contribution that the Area Action Plan has to play in the sustainable development of the City Centre, and the wider Plymouth sub region.

4.2 The report finds that since the City Centre and University AAP Issues & Preferred Options Consultation (November 2008) the plans for the City Centre have improved in the following areas:

- Specific proposals that positively respond to the climate change agenda by enabling the delivery of a Low Carbon Energy network.
- Specific recognition of measures needed to address flood risk around Western Approach and Colin Campbell Court.
- Proposals around North Cross now include measures aimed to reduce potential adverse impacts of development upon air quality.
- Significant support to improve pedestrian & cycle movement around the City Centre.
- Encouragement for local enterprise and markets for goods and service through policy support for the West End's role as a seedbed for small business, and as a focus for independent retailers.

4.3 The appraisal identifies that implementing the plan is likely to generate the following potentially significant adverse impacts, and recommends measures for monitoring these:

- Significant increases in the number of car-based trips to the City Centre
- Subsequent increases in the levels of carbon emissions
- Significant reductions in air quality around the Strategic Road Network.

4.4 The appraisal recommends that in taking forward the delivery of the plan, the following areas of further work are required to ensure that the AAP's beneficial effects are maximised:

- a City wide Surface Water Management Plan
- Establishing an Energy Service Company to support delivery of low carbon energy network
- The proposed Public Realm Strategy should include measures for management & recycling of waste, and integration of cycling back into the City Centre precinct
- Future revisions of Plymouth City Council's Planning Obligations Supplementary Planning Document should consider greater support for local labour initiatives.

Chapter 5: Appendices

Appendix 1

Compliance with SEA Directive

5.1 The following table comprises a list of the SEA Directive requirements which need to be met within the Sustainability Appraisal process. The SEA requirements relate to the production of what is referred to in the Directive as an 'Environmental Report' for submission in parallel to the final plan.

5.2 This report only relates to current stage the AAP's development. Some of the Directive's requirements have been (or will be) covered by other publications. This table signposts readers to the various section of different reports and chapters that demonstrate compliance with the Directive.

SEA Requirements	Evidence in this Report	Evidence in other documents
<p>Preparing an environmental report in which the likely significant effects on the environment of implementing the plan, and reasonable alternatives taking into account the objectives and geographical scope of the plan, are identified, described and evaluated. The information requirements under Article 5 and Annex of the directive are:</p>		
<p>A) An outline of the contents, main objectives of the plan, and relationship with other relevant plans and programmes</p>		City Centre & University AAP - Sustainability Appraisal - Issue & Preferred Options Report
<p>B) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan</p>		Plymouth LDF Sustainability Appraisal Scoping Report March 2008
<p>C) The environmental characteristics of areas likely to be significantly affected</p>		Plymouth LDF Sustainability Appraisal Scoping Report March 2008 & City Centre & University AAP - Sustainability Appraisal - Issue & Preferred Options Report (Chapter 2)
<p>D) Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as designated pursuant to Directives 79/409/EEC and 92/43/EEC</p>		As above
<p>E) The environmental protection objectives, established at International, Community or National level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation</p>		Plymouth LDF Sustainability Appraisal Scoping Report March 2008
<p>F) 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 interrelationship between the above factors. These effects should include secondary archaeological heritage, landscape and the, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects)</p>	Chapter 3	City Centre & University AAP - Sustainability Appraisal - Issue & Preferred Options Report (Chapter 3)
<p>G) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan</p>	Chapter 3	City Centre & University AAP - Sustainability Appraisal - Issue & Preferred Options Report - Chapter 3

SEA Requirements	Evidence in this Report	Evidence in other documents
H) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	Chapter 1	Alternatives & method discussed in City Centre & University AAP - Sustainability Appraisal - Issue & Preferred Options Report
I) A description of measures envisaged concerning monitoring in accordance with Article 10	Chapter 3	
J) A non-technical summary of the information provided under the above headings.	Executive Summary	Non technical summaries have been produced to accompany the SA's reports for the Issues & Options, and Issues and Preferred Options Consultation documents.
Consulting:		
<ul style="list-style-type: none"> • authorities with environmental responsibilities, when deciding on the scope and level of detail of the information which must be included in the environmental report (Article 5.4) • authorities with environmental responsibilities and the public, to give them an early and effective opportunity within appropriate time frames to express their opinion on the draft plan and the accompanying environmental report before the adoption of the plan (Article 6.1, 6.2) • other EU Member States, where the implementation of the plan is likely to have significant effects on the environment in these countries (Article 7). 		<p>All authorities / organisations on List A within Plymouth's LDF Statement of Community Involvement. In total over 70 organisations including Natural England, Environment Agency & English Heritage are consulted on all draft stage of the AAP.</p> <p>Natural England, Environment Agency & English Heritage were consulted on Plymouth LDF Sustainability Appraisal Scoping Report (March 2008)</p>
Taking the environment report and the results of the consultations into account in decision-making (Article 8).	Chapter 3	Environmental Statement to be produced at time of Adopted version of AAP
Providing information on the decision:		
<p>When the plan is adopted, the public and any countries consulted under Article 7 must be informed and the following made available to those so informed:</p> <ul style="list-style-type: none"> • the plan as adopted 		Environmental Statement to be produced at time of Adopted version of AAP

SEA Requirements	Evidence in this Report	Evidence in other documents
<ul style="list-style-type: none"> • a statement summarising how environmental considerations have been integrated into the plan and how the environmental report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Article 7 have been taken into account in accordance with Article 8, and the reasons for choosing the plan as adopted, in the light of the other reasonable alternatives dealt with; and • the measures decided concerning monitoring (Article 9). 		
Monitoring the significant environmental effects of the plan's implementation (Article 10)	Chapter 3	LDF Annual Monitoring Reports

SEA Directive Compliance

Appendix 2

Plymouth's LDF Sustainability Appraisal Framework (from Plymouth's Sustainability Appraisal Scoping Report March 2008):

High Level Objective	Appraisal Criteria: Does the policy or proposal..?	Explanation of the appraisal criteria (where not obvious)	As indicators of progress towards these objectives the Sustainability Appraisal will look for.....
1. Improve health, well being, and community safety	1.1 Improve health & support healthy lifestyles	Measures that will reduce physical & mental illness, and improve safety. Sedentary lifestyles and lack of routine basic exercise are one of the main threats to health.	Development that contributes to positive well being through pleasant surroundings /living conditions, access to natural greenspace, freedom from noise & pollution etc. Development that proactively reduces risks associated with known safety hazards ie. road safety, blast zones, tomb stoning. Patterns of development that promote active lifestyles ie. where walking & cycling are made attractive as routine forms of transport.
	1.2 Reduce health inequalities	Where you live or your level of income (or other disadvantage) should not increase exposure to health risks or reduce access to a healthy lifestyle.	Development proposals that proactively address existing health inequalities through measures that seek to improve the provision of health care services, address current causes of poor health.
	1.3 Reduce anti social behaviour, crime and fear of crime		Development that designs out crime, eg by providing passive surveillance & avoiding dead spaces and times. Proposals that incorporate design features that address existing issues associated with anti social behaviour.

High Level Objective	Appraisal Criteria: Does the policy or proposal..?	Explanation of the appraisal criteria (where not obvious)	As indicators of progress towards these objectives the Sustainability Appraisal will look for.....
<p>2. Support communities & neighbourhoods that meet people's needs</p>	<p>2.1 Help provide a suitable mix of housing that is available & affordable for everyone</p>		<p>Development that delivers appropriate levels of affordable housing and Lifetime Homes.</p> <p>Development that delivers a well-integrated mix of decent homes of different types and tenures to support a range of household sizes, ages and incomes.</p> <p>Development that promotes energy efficiency and affordable warmth in existing housing.</p>
	<p>2.2 Supports the delivery of a full range of community facilities</p>	<p>Community facilities could include shops, GP surgery, pub, bank, place of worship, community centres, leisure or cultural facilities.</p>	<p>Development that addresses identified deficiencies in the provision of community facilities. In providing these facilities they should be grouped to provide strongly identifiable local, neighbourhood or district centres. Cultural facilities as integral part of new development.</p>
	<p>2.3 Give everyone access to local opportunities for learning, training, skills, knowledge & culture</p>	<p>Important both to equip people for economic success and for personal development.</p>	<p>Development that addresses identified deficiencies in the quality and/or accessibility of schools, colleges, libraries and training establishments. Encouragement for a diversity of choice of employment, particularly in areas of deprivation. Schools need to be encouraged to support a wider range of community facilities.</p>
	<p>2.4 Provide a range of opportunities for people to work locally</p>	<p>This can help to promote community strength & identity and vibrancy and also reduce the need to travel.</p>	<p>A balance between the areas economically active population and numbers of jobs. Encouragement for a diversity of choice of employment, particularly in areas of deprivation.</p>
	<p>2.5 Provide access to</p>		<p>Patterns of development that support the provision of a range of publicly accessible open space / green space within walking</p>

High Level Objective	Appraisal Criteria: Does the policy or proposal..?	Explanation of the appraisal criteria (where not obvious)	As indicators of progress towards these objectives the Sustainability Appraisal will look for.....
	open space / greenspace for sports, play & informal recreation		distance of the home. Improvements to the quality of open space / greenspace facilities within walking distance of the home.
	2.6 Help provide opportunities for participation in local action and decision making		Development proposals incorporate provision for community governance.
3. A diverse and thriving economy that meets peoples needs	3.1 Support business and enterprise that will improve the quantity and quality of jobs within the city.	Support sectors that can benefit from Plymouth's competitive advantage as identified within the Local Economic Strategy.	Development that proactively supports the following sectors advanced engineering, marine industries, and medical/healthcare sectors, financial /business services, creative industries, and tourism.
	3.2 Support the development of a skilled workforce and increase levels of economic participation	There is a need to raise skill levels to enable people to take advantage of better jobs and maximise job opportunities for all. Sustainable Economic growth requires a high levels of economic participation from within local communities and will necessitate targeted effort to enable the most deprived communities to realise higher and more sustainable rates of economic activity.	Proactive measures to address social / economic / environmental causes of worklessness and barriers to employment. Development that provides for training of local work force.

High Level Objective	Appraisal Criteria: Does the policy or proposal..?	Explanation of the appraisal criteria (where not obvious)	As indicators of progress towards these objectives the Sustainability Appraisal will look for.....
	3.3 Encourage local enterprise and support markets for local labour, goods & services.	There is a need to increase the circulation of wealth within the city. If business spend more of their income on goods and services within the locality this increases the benefits of business activities to the city and its economic security. This contributes to community strength, cohesion and resilience, as well as reducing the transport and energy intensity of the economy. There is a need to ensure goods & services are procured in a fair and ethical manner when local sourcing is not possible.	Promotion of local & regional markets in goods and services. Business start up units, encouragement to local businesses, especially micro & SMEs that adopt sustainable practices. Use of local labour and materials.
	3.4 Reduce the vulnerability of the economy to climate change	Need to harness the opportunities associated with the growing market for low carbon goods and services. Extreme weather, crop failures, water shortages at home or abroad may disrupt trade, long distance transport and availability of energy and other resources, and increase insurance liabilities. Need to ensure new employment buildings are designed to provide thermal comfort within higher summer temperatures that can be expected, without a reliance on the expense of air conditioning.	Economic activity that supports the development of a low carbon economy avoids unnecessary dependence on long distance trade and travel. A leisure economy that will encourage people to stay within the city, district or neighbourhood rather than go further a field. Enterprise that seeks to harness the economic opportunities that climate change will bring ie. renewable or decentralised energy, sustainable construction.
4. A well connected city that meets people's need for access to	4.1 Reduce the need /	Road traffic is the only major terrestrial source of greenhouse emissions still increasing, the main source of local air pollution and is regularly identified as one of the main threats to local quality of life, due to danger, noise & community severance. Car dependence deepens social exclusion and adds to pressures for unsustainable land use patterns. Reliance on road links for external transport is a particular issue in Plymouth due to poor quality rail links.	Developments that reduce the need to travel, such as ensuring that people live closer to their work, and increasing access to IT facilities to promote modern communication methods that reduce car dependency. Avoid developments that generate further road traffic. Improvement of alternatives to the car eg, public transport, video conferencing facilities. Live work units and design that facilitate home working.

High Level Objective	Appraisal Criteria: Does the policy or proposal..?	Explanation of the appraisal criteria (where not obvious)	As indicators of progress towards these objectives the Sustainability Appraisal will look for.....
<p>places and services with least damage to communities and the environment</p>	<p>desire to travel by car or air.</p>	<p>Air travel is a primary contributor to the causes of climate change, and it is widely recognised that demand for air travel requires management to alleviate some of the ongoing impacts.</p>	<p>Proposals that improve strategic cycling and walking networks.</p> <p>Avoidance of development that will encourage air travel.</p> <p>Encourage a switch from transporting freight by road to rail or water through provision of improved port and rail facilities.</p>
<p>4.2 Help everyone to access basic services easily safely and affordably</p>	<p>4.2 Help everyone to access basic services easily safely and affordably</p>	<p>Enabling people to get access to what they want in life with less travel is a win win , reducing costs, effort and environmental damage. In order to achieve sustainable communities, the starting point should be that all facilities should be grouped together to form local and neighbourhood centres which are easily accessible, ideally on foot.</p>	<p>Distance to, and ease of accessing schools, shops, places of work and recreation.</p>
<p>4.3 Make public transport , cycling & walking easier and more attractive</p>	<p>4.3 Make public transport , cycling & walking easier and more attractive</p>	<p>There is need to ensure that maintain and enhance the quality of these assets not only within our designated sites, Contact with nature is a key determinant of quality of life is essential component of sustainable communities.</p>	<p>Development that provides safe, attractive and direct routes for cyclists and walkers.</p> <p>Delivery of gaps in strategic cycle and walking networks. Patterns of development that support their use eg short distance to local services, and that improves the public transport offer.</p> <p>Development that contributes to delivering priorities of the Rights of Way Improvement Plan.</p>
<p>5. Maintain & enhance the quality of the city's built & natural environment</p>	<p>5.1 Protect & enhance biological & geological diversity</p>	<p>Protection not only of designated sites but of wildlife interest everywhere.</p> <p>Proposals that integrate biodiversity enhancements ie wildlife friendly landscaping & SUDs, green roofs,</p>	<p>Protection not only of designated sites but of wildlife interest everywhere.</p> <p>Proposals that integrate biodiversity enhancements ie wildlife friendly landscaping & SUDs, green roofs,</p>

High Level Objective	Appraisal Criteria: Does the policy or proposal..?	Explanation of the appraisal criteria (where not obvious)	As indicators of progress towards these objectives the Sustainability Appraisal will look for.....
			<p>Development that proactively addresses deficiencies in the city's Biodiversity Network to support adaptation to climate change.</p> <p>Proposal that increase the area of accessible natural greenspace.</p>
	5.2 Protect and enhance local landscape & green space	Pattern and form of development that is sensitive to the qualities and functions of existing green space assets. Development that supports the long term sustainable management of green space assets. (ie recognising & supporting the role of agriculture in the urban fringe).	<p>Development that ensures recreation and access is appropriately managed to ensure landscape and biodiversity is not damaged.</p> <p>Development that supports the delivery of the City's Greenspace Strategy, and avoids impacts on adjoining Areas of Outstanding Natural Beauty.</p>
	5.3 Avoid areas of high flood risk and reduce the vulnerability to future flooding	Existing & new development needs to plan for increased flood risk associated with climate change. New development should seek to reduce flood risk overall.	Appropriate use of analysis from Strategic Flood Risk Assessment, measures to alleviate existing or potential surface water drainage problems, the incorporation of the principles of SUDs from early stage of design (master planning).
	5.4 Maintain and enhance historical buildings, structures, monuments and remains of acknowledged importance	Plans and proposals should recognise the role of the historic environment in establishing local distinctiveness and its role in regeneration, leisure, recreation and tourism. The importance of partnership working (public private and voluntary) in addressing the opportunities and challenges facing the historic environment should be recognised.	<p>Development that ensures the historic environment is accessible and raise its profile, whilst ensuring access is managed do assets are not eroded.</p> <p>Development that protects and enhance Plymouth's historic and archaeological heritage, and value its role in regeneration.</p>
5.5 Provide for a high quality urban			Proposals which seek to deliver high quality and inclusive design solutions which improve the character and the quality of an area, and the way it functions.

High Level Objective	Appraisal Criteria: Does the policy or proposal..?	Explanation of the appraisal criteria (where not obvious)	As indicators of progress towards these objectives the Sustainability Appraisal will look for.....
	environment with highest possible standards of urban design		
6. Minimise consumption of natural resources	6.1 Reduce non renewable energy consumption and green house gas emissions	Plans & proposals should look for ways to design out energy use and incorporate energy efficiency measures.	Proposals that facilitate the incorporation of decentralised energy systems, that encourage energy efficiency and allow the use of renewable energy sources.
	6.2 Reduce water consumption	Plans and proposals should consider the impact on water supply.	Designs that integrate gray water recycling.
	6.3 Minimise consumption and extraction of minerals		Greatest possible use of old material in new construction, provision for reuse and recycling.
	6.4 Reduce waste	Apply principles of waste hierarchy at a local level. Avoid the creation of waste at source. Re use, recycling, digestion and composting are better than landfill.	Development that encourages waste minimisation and the sustainable management of future waste streams. eg. community recycling or composting infrastructure. Reuse & recycling of demolition waste.
	6.5 Minimise land, water, air and light pollution	Projected growth in the city may cause localised air quality issues due to increases in vehicle traffic. Regeneration provides opportunity to clean up areas of contaminated land.	Proactive measures to address localised air quality issues.

Plymouth LDF Sustainability Appraisal Framework



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