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1 Status of the Report

1.1 This report concludes the third stage (Stage C) of the Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the Submission Version of Plymouth City Council’s Sutton Harbour Area Action Plan (AAP). In addition to the review of Submission of the AAP this report contains a reference to future monitoring requirements.

1.2 A preliminary appraisal was produced in 2005, and the appraisal of the Preferred Options (Volume 2) in October 2006. The Scoping Report was produced in March 2005.

Previous Appraisals and Assessments

1.3 Plymouth City Council prepared an SEA/SA of the Preferred Options Report for the Sutton Harbour AAP in October 2006 and published the Preferred Options Report itself in November 2006.

1.4 Plymouth City Council developed its initial ideas for Sutton Harbour as part of the overall studies leading to the Preferred Options for the Core Strategy. These outline proposals were assessed by the equivalent stage of the SEA/SA for the Core Strategy, which was undertaken in June and July 2005.

1.5 The conclusions reached in reviewing the initial issues and options for Sutton Harbour in March 2005 and repeated in the Core Strategy Submission Draft SEA/SA (26 July 2006) are set out below:

Comments on the Sutton Harbour Area Vision in the SEA/SA Core Strategy Submission Draft

- In enhancing the water front and increasing access opportunities care needs to be taken to ensure that flood defences remain intact
- Achieving mixed use communities is a positive approach to future planning
- However, while increasing residential and commercial uses it is important to ensure that the design of housing stock and dwelling units meets the needs of a 21st century community and that the design of buildings is sensitive to the surrounding built environment. This includes retaining locally distinctive features and seeking to minimise energy consumption and waste generation
- Proposals to enhance streetscapes, gateways and expand the tourism potential are positive opportunities to reinforce Sutton Harbour’s status as an important waterfront location. However impacts associated with late opening hours from leisure and entertainment facilities will have to be carefully handled to ensure that it does not impact on the quality of life of adjacent communities
1.6 The conclusions reached in reviewing the Preferred Options Report for the Sutton Harbour AAP in October 2006 are set below:

SEA/SA comments on the Preferred Options Report for the Sutton Harbour Area Action Plan:

The results of the Preferred Options SA indicated that whilst the AAP is generally positive there are a number of general issues which need to be addressed

The following recommendations were suggested as ways of improving the sustainability of the AAP:

- Throughout the phasing of development, it is important to ensure that the impacts on the existing community are mitigated through the provision of adequate services, facilities and infrastructure to meet all needs
- Each development proposal and Area Action Plan should not be considered in isolation. The LDF needs to recognise that depending on the timing of proposals, implementation and funding streams impacts may occur on adjacent land uses which need to be mitigated
- A detailed assessment of educational need based on the future population figures for the area needs to be undertaken in order to determine whether additional facilities are required
- Proposals need to refer to the Strategic Flood Risk Assessment, which identifies the need for an assessment of flood risk and the impact on the marine environment. Plymouth City Council should work with the Environment Agency in establishing detailed mitigation measures
Public transport infrastructure needs to be in place in advance of new development occurring. It is important not only to influence this modal shift through residential development but also through the decisions of major employers. All new large scale businesses should be required to submit green travel plans and commit some level of contribution/investment where development is not adjacent to the bus network to improve footpath and cycle route links. A contingency plan needs to be available to ensure that if people cannot be encouraged to make a modal switch potential issues relating to traffic congestion and air pollution can be resolved.

Public transport services must be frequent enough and widely available to encourage a modal shift in the behaviour of residents, and to serve tourists needs.

A Design Guide should be produced for all development on the re-use of construction and demolition materials on site, e.g. through planning conditions requiring developers to provide a demolition plan and covering the efficient water and energy use, reuse and sourcing of local materials as part of the sustainable construction and design guidance. Design proposals should consider opportunities to support renewable energy and sustainable urban drainage schemes. This commitment should not just be reflected in residential dwellings but also for large businesses through environmental management policies.

Opportunities should be explored to prepare development proposals with waste management plans in place.

Measures should ensure that any potential damage to the historic environment is avoided.

Leisure facilities with late opening hour licences and industries/workshops in the vicinity of residential developments, have the potential to cause disturbance, careful consideration should therefore be given to the siting of adjacent land uses. Conflicts between different land uses should be minimised to avoid disturbance and potential impacts associated with air and noise pollution.

These summary recommendations left a number of issues raised as part of the Preferred Options SEA/SA report un-addressed. These are:

- The proposals raise a number of questions around basic needs and community structure eg Will targets for affordable housing be achieved? Will proposals result in a change in community structure through the purchase of second homes? Will people living in the new development areas actually work there, or will there be working elsewhere in the City?

- It is uncertain how local employment opportunities will be supported? Issues worth considering at this stage are: Will there be a significant level of in-migration on a daily basis from elsewhere in the City? Will the creation of an attractive high quality environment result in the displacement of existing businesses from elsewhere and what is the consequential effect on local employees?
2 Appraisal of the Sutton Harbour Area Action Plan

Introduction

2.1 This document appraises the submission version of the Sutton Harbour AAP, focusing on the changes that have occurred since publication of the Preferred Options document.

2.2 The SEA/SA process has run concurrently with plan making, and Plymouth City Council have carefully considered the observations and recommendations of the SEA team in revising successive drafts of the AAP. This appraisal was conducted on a draft of the AAP dated 21st August 2007 to further refine the plan prior to submission.

2.3 A summary of the assessment has been provided, in the matrices set out as Table 2. This is followed by a more detailed discussion of the sustainability issues arising from each proposal.

2.4 The previous SEA/SAs for the Sutton Harbour AAP have been completed by Land Use Consultants. This reappraisal has been completed in-house by Plymouth City Council Planning and Regeneration officers. The approach adopted at this stage of the SEA/SA has been to:

- Review the previous findings of the SEA/SA relating to the Preferred Options (October, 2006), and consider whether the recommendations have been incorporated into the submission version
- Examine the changes made since Preferred Options in the preparation of the submission version Sutton Harbour AAP, and assess the nature of their likely environmental, social and economic impacts
- To review the appraisal in the light of new evidence base documents such as Plymouth's Level 2 Strategic Flood Risk Assessment and the Sutton Harbour AAP Habitat Regulations Assessment
- To review the appraisal in the light of relevant changes to wider policy framework relating to sustainable development
- Make recommendations on actions that may be appropriate to achieve further improvements in sustainability.

Key Changes Since Prefered Options

2.5 The key changes to the Sutton Harbour AAP since the publication of the Preferred Options document are:

- **Preferred Option 2: Exchange Street Car Park.** This option is not being taken forward as a proposal due to concerns regarding loss of car parking capacity.

- **Preferred Option 3: Sutton Jetty.** This option is not being taken forward as a proposal due to concerns around flood risk, impact on the historic environment.

- **Preferred Option 14: Former Art School and Depot, Teats Hill.** This option is not being taken forward because the Art School building has been demolished.
2.6 The key changes in the AAP’s evidence base which influence this SEA/SA include:

- Sutton Harbour Level 2 Strategic Flood Risk Assessment (May 2007)
- Habitat Regulations Assessment of Plymouths LDF Core Strategy (January 2007)
- Habitat Regulations Assessment Screening Report Sutton Harbour AAP (August 2007) draft

2.7 The key changes in the wider policy framework that have a significant influence on this SEA/SA are:

- Plymouth’s Adopted LDF Core Strategy (April 2007)
- Supplement to PPS1: Planning & Climate Change (Dec 2006)
- PPS25 Development & Flood Risk (Dec 2006)
- Code for Sustainable Homes: A step-change in sustainable building practice (December 2006)
- The Energy White Paper (May 2007)

2.8 This SA/SEA report will not cover the appraisal of the AAP objectives as these have not altered since Preferred Options.

**Appraisal of each Policy or Proposal - The Sustainability Appraisal Matrix**

2.9 Table 1 overleaf presents a summary of the appraisal of each proposal and compares it against the appraisal results for the equivalent preferred option. The following section of the document discusses in detail the revised appraisal results for each proposal. Sustainability scores used in Table 1 are based on the following ranking:

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## 2. Appraisal of the Sutton Harbour Area Action Plan

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<th>Climate Change</th>
<th>Resources</th>
<th>Energy</th>
<th>Waste</th>
<th>Work and Incomes</th>
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Plan 2  
Appraisal of the Sutton Harbour Area Action

Table 1 Sustainability Appraisal Matrix showing results of SA for Sutton Harbour AAP Preferred Options compared with the draft proposals within the submission document.
Appraisal of each Policy or Proposal - Analysis of Key Findings

Overarching Issues

2.10 The appraisal matrix highlights that when the majority of proposals are tested against the Sustainability Appraisal, objectives for Climate Change, Resources, Energy & Waste show uncertainty about how the proposal, or the AAP as a whole, will address these components of sustainable development.

2.11 The appraisal matrix also highlights that there has been little or no change on these issues between the Preferred Options, and Submission versions of the plan. This appraisal recommends that the plan and/or individual proposals responds to these issues in the following manner:

Climate Change & Resources

2.12 Text should be added to ensure that climate change is appropriately addressed, particularly for the larger developments. It is recommend that Sutton Harbour AAP follows the example of the councils previous AAP's and include a requirement for larger proposals to submit a Climate Change & Sustainability Statement.

2.13 The statement should as a minimum, demonstrate how the development will:

- perform in relation to the Code for Sustainable Homes & BREEAM standards
- be designed to use less energy, incorporate the use of renewables and decentralised/low carbon energy systems
- incorporate adaptation measures to reflect forecasted changes in climate and flood risk
- provide for sustainable urban drainage and waste management systems
- provide for sustainable transport.

2.14 To ensure that additional costs of these responses to the climate change agenda do not threaten the economic viability of the development proposal it would be beneficial if the text made clear that the statement is intended to encourage the move towards zero carbon development in a phased way.

Energy

2.15 The scale, density and mixed use characteristics of the many of the proposals within the AAP lend them to the consideration of of Combined Heat & Power, or Tri generation (Combined Heat, Power & Cooling) as way of delivering low or zero carbon development. The LDF Core Strategy Policy CS20 already requires the use of onsite renewables to deliver reductions in carbon emissions, but this policy will be applied on a site by site basis, and therefore the opportunity to deliver an integrated approach to renewable energy across a range of sites could be lost. It is recommended that for proposals SH01, SH02, SH04, SH05, & SH07, that renewable energy should be investigated as part of the site master plan to ensure an integrated approach to sustainable energy is considered.
Waste

2.16 The management of construction and demolition waste should be addressed as part of the climate change & sustainability statement.

Flood Risk

2.17 The AAP needs to respond to the evidence provided within the Level 2 Strategic Flood Risk Assessment. The SFRA highlights a number issues in relation to:

- The key role Sutton Lock plays in providing flood defence for the AAP area and the need / value that could come from a coordinate approach to flood defence. Sutton Lock currently provides as a standard of defence below what would be normally required, and the operation of the lock at a frequency above its design specification increases the risk of the lock gates being stuck open during a high tide event
- The need to consider the vulnerability of certain development types in areas of high flood risk, particular around Sutton Road
- The need to increase capacity in surface water drainage systems to deal with increased levels and intensity of rainfall expected with climate change and the existing problems with tide locking along Sutton Road.

Biodiversity

2.18 A Habitat Regulations Assessment has been completed for the AAP. This considers the impact of the AAP on the biodiversity found within sites of European importance for nature conservation. The HRA identifies the potentially significant adverse impacts of the Sutton Harbour AAP as:

- Recreational disturbance impacts at Plymouth Sound & Estuaries SAC & Tamar Estuaries Complex SPA.

2.19 The following proposals are identified within the HRA as contributing to the increases in recreational disturbance:

- SH01 Commercial Wharf, Phoenix Wharf, Elphinstone and Lambhay Hill Car Park
- SH02 Bretonside Bus / Coach Station and Environs
- SH03 North Quay House and Car Park
- SH04 47 – 67 Exeter Street
- SH05 Friary Park
- SH07 Sites East and West of Sutton Road
- SH08 Coxside Barbican Car Park
- SH10 Lock Bridge
- SH11 Queen’s Anne Battery

2.20 The HRA recommends that each of these proposals should be amended to include reference to the need to provide appropriate contributions towards managing off site recreational impacts within Plymouth Sound & Estuaries SAC and Tamar Estuaries SPA. This recommendation is made in light of PCC’s existing commitment made as a result of the Core Strategy HRA to
provide within the forthcoming Planning Obligations SPD appropriate provisions for negotiating individual contributions towards managing recreational impact within Plymouth Sound & Estuaries European Marine site. Consultation on this document is expected to start in October 2007.

2.21 The inclusion of the recommendations from the HRA will increase the submission version of the AAP’s contribution to the sustainability objectives for biodiversity.

**SH01: Commercial Wharf, Phoenix Wharf, Elphinstone and Lambhay Hill Car Park**

**Changes from the Preferred Options**

2.22 No significant changes have been made to this proposal.

**Revised SEA/SA Assessment**

2.23 The revised sustainability appraisal concluded that this proposal could have a positive impact (see appraisal matrix) on the economy, as there is provision for employment and retail uses which relate to the specific location i.e. maritime and tourism. Local needs would benefit from the small-scale marine related employment, as smaller units are more likely to be taken up by local businesses.

2.24 Provision for public open space with public access to the waters edge should encourage the use of the water for recreation, thus making improvements to health. Increasing public access will also encourage walking and cycling, with public access to the landing stage and slipways increasing opportunities for water transport. The area includes the South West Coast Path and redevelopment of the site should provide the opportunity to reroute this along the quay side. Provision for affordable housing and lifetime homes also contributes towards basic needs.

2.25 Part of the proposal site falls within EA Flood Zones 2 & 3. The Council’s Level 2 SFRA has refined the definition of flood zones within this area and shows that the majority of the site is within Flood Zone 1, except Phoenix Wharf. Any proposal for residential development should be limited to Flood Zone 1 and ensure that it provides for escape routes onto the higher ground of Madeira Road.

**Recommendations**

2.26 The proposal should include the requirement for a feasibility study into the integration of a Combined Heat & Power and renewable energy solutions as part of the site master plan to ensure that the opportunities for an integrated approach to sustainable energy is considered.

2.27 Explicit reference should be made to the opportunity to reroute the South West Coast Path alongside the quay side, as part of the areas redevelopment.
SH02: Bretonside Bus/Coach Station and environs

Changes from the Preferred Options

2.28 This proposal has changed noticeably since the Preferred Options, enabling an office-led mixed use development (B1) with residential and leisure uses rather than being led by retail.

Revised SEA/SA Assessment

2.29 Provisions for improved pedestrian and cycle links and high-quality public realm will greatly improve an area which is currently unattractive and can feel unsafe. Proposals for affordable housing and Lifetime Homes will strongly support improvements to basic needs.

2.30 There is an opportunity to increase the performance of the proposal in relation to the SA objective of encouraging local enterprise (Local Needs) by recommending smaller unit sizes for the retail / cafes / bars / restaurants and leisure uses.

2.31 The proposals shift towards an employment led focus may be considered as a positive step in relation to the sustainability of economic activity within the city centre as a whole. The focus on retail led development as expressed at preferred options generated a concern that a large retail ‘anchor’ in this area of the city could have had negative impact on the economic viability of smaller / independent retailing in the west end of the city centre.

2.32 The Council's Level 2 Strategic Flood Risk Assessment identifies that under current 100 year climate change scenarios that the junction of Bretonside and Vauxhall Street could flood to depths in excess of 1 metre, if flood defences at Sutton Lock are breached. The scale of flooding across the full length of Vauxhall Street & Bretonside means the implications for key transport routes into and out of the city could be significant.

Recommendations

2.33 The proposal should include the requirement for a feasibility study into the integration of a Combined Heat & Power and renewable energy solutions as part of the site master plan to ensure that the opportunities for an integrated approach to sustainable energy are considered.

2.34 Text could be added so that smaller and medium sized units are encouraged.

2.35 This proposal in common with other larger proposals throughout the AAP should include the appropriate contributions towards the deliver of an integrated approach towards flood defence around the harbour.

SH03: North Quay House and Car Park

Changes from the Preferred Options

2.36 There are no significant changes from the Preferred Options.
Revised SEA/SA Assessment

2.37 The revised assessment concluded that the proposal would have a positive impact on the economy, work and incomes and local needs, as small-scale units would appeal to local businesses and entrepreneurs.

2.38 The Council's Level 2 Strategic Flood Risk Assessment identifies that under current 50 year climate change scenarios that a large proportion of the site will flood to depths of approximately 0.5 metres, if flood defences at Sutton Lock are breached. Redevelopment of the site will need to address flood risk and ensure that the site is safe in relation to future flood risk. As the main flow routes onto the site is down Hawkers Avenue & Lower Street it is suggested that the proposal incorporates a recommendation that slight raising of road levels at these points could defend this site and reduce flood risk along Bretonside in general. Any road raising would need to be sensitive to the sites locations within the Barbican Conservation Area.

Recommendations

2.39 Include reference to the need for the development to contribute towards an integrated approach towards flood defence around the harbour.

SH04: 47-67 Exeter Street

Changes from the Preferred Options

2.40 There were no significant changes from the Preferred Options.

Revised SEA/SA Assessment

2.41 There is an opportunity to increase the the performance of the proposal in relation to the SA objective of encouraging local enterprise (Local Needs) by recommending smaller unit sizes for the cafes / bars / restaurants and leisure uses.

Recommendations

2.42 The proposal should include the requirement for a feasibility study into the integration of a Combined Heat & Power and renewable energy solutions as part of the site master plan to ensure that the opportunities for an integrated approach to sustainable energy are considered.

2.43 It is recommended that that text is added to the proposal to encourage small scale enterprise, ie smaller unit sizes.
SH05: Friary Park

Changes from the Preferred Options

2.44 The proposal area has been extended to include the petrol station on Exeter Street and the shops in between.

Revised SEA/SA Assessment

2.45 The inclusion of the petrol station site will help to provide an integrated solution to air quality management issues along Exeter Street. The revised assessment therefore concluded that the proposal would have a strong positive impact on health / well-being and pollution. Pedestrian and cycle links should encourage people to be more active. Some concerns still remain about whether a modal shift can be encouraged, and the negative impact of increased vehicle movements if it is not achieved.

Recommendations

2.46 Due to the scale of the redevelopment at this site this proposal provides the opportunity to score better against the SA objectives for biodiversity and greenspace. This could help address the lack of greenspace within the Sutton Harbour and the City Centre and provide a valuable addition to the city's Biodiversity Network by providing a 'stepping stone' between the waterfront and Beaumont Park. It is recommended that the existing requirements for a pocket park, and new pedestrian and cycle links towards Beaumont Park are brought together into an area of high quality greenspace.

2.47 The proposal should include the requirement for a feasibility study into the integration of a Combined Heat & Power and renewable energy solutions as part of the site master plan to ensure that the opportunities for an integrated approach to sustainable energy are considered.

SH06: Sutton Wharf / North Quay

Changes from the Preferred Options

2.48 No significant changes have been made since the Preferred Options.

Revised SEA/SA Assessment

2.49 The revised assessment concluded that the proposal would have a positive impact on transport and access (see appraisal matrix). The removal of car parking from areas such as this is positive addition to the sustainability of the plan and will encourage more pedestrians to use an area which is currently vehicle dominated. The introduction of more active ground floor uses should also help to achieve this aim. It should also encourage people to access the area by means other than private vehicle.
Recommendations

2.50 The Level 2 Strategic Flood Risk Assessment indicates that this area of quayside would be subject to flooding in excess of 1.5 metres (100 year climate change scenario) if flood defences at Sutton Lock are breached. It is recommended that any development of pavilions incorporate flood resilient design features.

SH07: Sites east and west of Sutton Road

Changes from the Preferred Options

2.51 There are no significant changes from the Preferred Options.

Revised SEA/SA Assessment

2.52 There is still a question mark over how the proposal will perform against the objectives for health & well being. It is recommended that the capacity of local care facilities to absorb the proposed population growth is addressed as part of the master plan.

Recommendations

2.53 The Level 2 Strategic Flood Risk Assessment indicates that a significant percentage of the proposal area is at risk of flooding (100 year climate change prediction) to depths of between 0.5 and 1.5 metres if the defences at Sutton Lock are breached.

2.54 It is recommended that the proposal responds to the flood risk in the following ways:

- Include a recommendation for contributions towards a coordinated response to flood risk, that recognises the key role Sutton Lock plays in defending this regeneration area, and the increasing importance of this role in the face of sea level rise
- More vulnerable development (ie. residential) is excluded from areas west of Sutton Road
- That flood risk is considered a central consideration as part of the master plan and that the opportunities to raise ground levels along Sutton Road and at Lockyers Quay are investigated to provided flood defence for land to the east
- The redevelopment of the area needs to address issues associated with existing surface waste drainage capacity along Sutton Road and insure this capacity is increased to respond to current climate change predictions

The proposal should include the requirement for a feasibility study into the integration of a Combined Heat & Power and renewable energy solutions as part of the site master plan to ensure that the opportunities for an integrated approach to sustainable energy are considered.
SH08: Coxside and Barbican Car Park

Changes from the Preferred Options

2.55 No significant changes have been made from the Preferred Options.

Revised SEA/SA Assessment

2.56 The revised assessment concluded that the proposal could make a positive contribution towards the sustainability objectives for basic needs through its recommendations for Affordable Housing and Lifetime Homes.

Recommendations

2.57 The Level 2 Strategic Flood Risk Assessment indicates that the proposal area is at risk of flooding (100 year climate change prediction) to depths of between 0.5 and 1.5 metres if the defences at Sutton Lock are breached.

2.58 It is recommended that the proposal responds to the flood risk in the following ways:

- Include a recommendation for contributions towards a coordinated response to flood risk, that recognises the key role Sutton Lock plays in defending this regeneration area, and the increasing importance of this role in the face of sea level rise.
- That the more vulnerable element of the development (ie. residential) is excluded from the proposal, unless additional evidence can be tabled that shows that the site could be made 'safe' for residential.
- Defending the site against future flood risk should be considered as part of the wider master plan for site east & west of Sutton Road. Consideration should be given to the possibility of raising road levels at Lockerley Quay and around the entrance to the Fish Market to provide a coordinated 2nd line of defence for all the sites and transport infrastructure east of the quay.

SH09: Fish Market

Changes from the Preferred Options

2.59 No significant changes have been made since the Preferred Options.

Revised SEA/SA Assessment

2.60 No change.
Recommendations

2.61 No recommendations.

SH10: Lock Bridge

Changes from the Preferred Options

2.62 No significant changes since the Preferred Options.

Revised SEA/SA Assessment

2.63 The revised assessment concluded that this proposal will have a positive impact on leisure, as it should improve access between the Barbican Leisure Park and the Barbican.

2.64 There are unresolved safety issues regarding anti-social behaviour around Teats Hill flats, with problems involving people walking from night clubs in the Barbican Leisure Park back towards the city centre.

Recommendations

2.65 The SFRA identifies that Sutton Lock plays a pivotal role in defending significant proportions of existing and proposed development within the Sutton Harbour area. The SFRA also highlighted that standard of defence that it currently provides will need to be increased to respond to sea level rise / climate change. It is recommended that the Lock Bridge proposal identifies this strategic function in terms of flood risk and the importance of a coordinated response to improving the defence standards.

SH11: Queen Anne's Battery

Changes from the Preferred Options

2.66 No significant changes since the Preferred Options.

Revised SEA/SA Assessment

2.67 In light of discussions with planning officers, it was decided that the proposal would have a positive impact on local needs (see appraisal matrix). Marine related employment uses are particularly suited to the locality.

Recommendations

2.68 There are no additional recommendations.
Monitoring

2.69 The SEA Directive requires that the significant environmental effects of implementing a plan or programme should be monitored. SA monitoring needs to cover the effects on the wider socio-economic components of the plan, as well as the environmental effects.

2.70 This appraisal of Sutton Harbour AAP has identified the following issues that are considered to present a risk of generating a 'significant effect'. These include:

- Recreational impacts upon the Plymouth Sound & Estuaries SAC and Tamar Estuaries Complex SPA
- Development in flood risk areas
- Affordable housing - waterfront residential development could result in property prices which are beyond the means of many local residents
- The ability to encourage a shift towards more sustainable transport modes.

2.71 Plymouth City Council will develop a SA monitoring framework that considers these significant risks / effects as a part of its Annual Monitoring Reports for the LDF.
3 Conclusions

Conclusions

3.1 There have only been minor changes to the Sutton Harbour AAP between the publication of the preferred options document and the draft of the submission version that was used for this appraisal. These changes do not significantly alter the sustainability of the plan as a whole, and generally the plan performs positively against the sustainability objectives.

3.2 The adoption of Plymouths LDF Core Strategy provides an increased confidence in the policy framework that underpins proposals within the AAP. This has led the appraisal team to conclude that some of the proposals have potential to deliver more favourable sustainability outcomes than at the time of Preferred Options publication. ie. Affordable Housing, Renewable Energy.

3.3 However the loss of a proposal to create a new green space at Exchange Street car park would appear to be a retrograde step given the paucity of green space provision within this part of the city.

3.4 Using evidence base material that has emerged since the publication of the preferred options the appraisal makes a number of key recommendations in relation to how the plan should respond to the following areas:

- **Flood Risk** - the Level 2 SFRA significantly increases the understanding regarding the extent and severity of potential flood events around the harbour. It has highlighted the strategic importance of Sutton Lock as providing defence for the majority of the AAP area, and that there are significant concerns about weaknesses in the operational capacity of the lock gates causing an increasing likelihood of the them failing during a flood event. The SFRA’s work on climate change scenarios shows that implications of this failure would be severe for many part of Sutton Harbour. There is therefore a need for a coordinated approach to flood defence measures at a scale greater than individual development proposals. The appraisal makes recommendations against the allocation of vulnerable development ie. (residential) on the east side of the harbour and identifies the need for development to address issues around the capacity of the existing surface water drainage schemes.

- **Climate Change** - The SA recognises that given the importance of sustainability objectives on energy, waste, resources and climate change that the plan should provide more certainty that these issues will be addressed (theses issues frequently are scored as ‘uncertain’ in the SA matrix). The SA recommends that to ensure that climate change is appropriately considered that there is a requirement for larger proposals to submit a Climate Change & Sustainability Statement, that demonstrates commitment to how the development will perform in relation to the Code for Sustainable Homes & BREEAM standards; be designed to use less energy, incorporate the use of renewable's and decentralised/low carbon energy systems; incorporate adaptation measures to reflect forecasted changes in climate and flood risk; provide for sustainable urban drainage and waste management systems; and provide for sustainable transport. The scale, density and mixed-use characteristics of the many of the proposals within the AAP lend them to the consideration of Combined Heat & Power, or Tri generation (Combined Heat, Power & Cooling) as way
of delivering low or zero carbon development. The proposals should include text that support the realisation of this potential.

- **Biodiversity** - A Habitat Regulations Assessment has been completed for the AAP. This considers the impact of the AAP on the biodiversity found within sites of European importance for nature conservation. The HRA identifies the potentially significant adverse impacts of the Sutton Harbour AAP as coming from recreational disturbance at Plymouth Sound & Estuaries SAC & Tamar Estuaries Complex SPA. The HRA recommends that proposals that could generate this impact should be amended to include reference to the need to provide appropriate contributions towards managing off site recreational impacts within Plymouth Sound & Estuaries SAC and Tamar Estuaries SPA.
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