

Bridgend County Borough Council

**Porthcawl Waterfront Supplementary
Planning Guidance**

**Sustainability Appraisal/Strategic
Environmental Assessment**

August 2007

Main Report

Bridgend County Borough Council

Porthcawl Waterfront Supplementary Planning Guidance

Sustainability Appraisal Report

Main Report

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Foreword

Bridgend County Borough Council has prepared Supplementary Planning Guidance (SPG) for the Porthcawl Waterfront.

Under the Planning and Compulsory Purchase Act 2004, Sustainability Appraisal (SA) is mandatory for all Local Development Plans (LDP's). SPGs are key documents prepared under the Local Development Plan (LDP). An environmental assessment is also required under European Directive 2001/42/EC 'on the assessment of certain plans and programmes on the environment'. This environmental assessment is known as Strategic Environmental Assessment (SEA).

To satisfy these requirements a Scoping Report for the SA/SEA was prepared and released for consultation in January 2007.

This document is the Sustainability Appraisal Report (SAR) which has been produced to accompany the Draft Porthcawl Waterfront SPG for public consultation. The SAR seeks to predict the social, economic and environmental implications of the SPG proposals. The SAR documents these predicted effects along with suggested mitigation measures to improve the sustainability of the preferred option and therefore the SPG as a whole.

In addition to the SAR, an Appropriate Assessment (under the Habitats Regulations 1994) has been prepared to inform the development of the SPG.

The consultation period for this SAR and the draft Porthcawl Waterfront SPG is from 20th August to the 1st October 2007.

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Abbreviations

Abbreviation	Definition
AA	Appropriate Assessment
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
BCBC	Bridgend County Borough Council
CADW	Historic Environment Service of the Welsh Assembly Government
CCW	Countryside Council for Wales
CLG	Communities and Local Government
IMD	Index of Multiple Deprivation
LDP	Local Development Plan
LNR	Local Nature Reserve
NNR	National Nature Reserve
ODPM	Office of the Deputy Prime Minister
PPP	Plans, Programmes and Policies
RIGS	Regionally Important Geological Site
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SAR	Sustainability Appraisal Report
SEA	Strategic Environmental Assessment
SINC	Sites of Importance for Nature
SMP	Shoreline Management Plan
SPG	Supplementary Planning Guidance
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage Systems
TPO	Tree Protection Orders
UDP	Unitary Development Plan
WAG	Welsh Assembly Government

Non-Technical Summary

Background

This document is the Sustainability Appraisal Report (SAR) for the Sustainability Appraisal (SA), incorporating Strategic Environmental Assessment (SEA), of the Porthcawl Waterfront Supplementary Planning Guidance (SPG), prepared for Bridgend County Borough Council (BCBC).

The Porthcawl Waterfront SPG updates the Development Framework Plan for the Porthcawl Regeneration Area that was approved following public consultation by BCBC and adopted as an SPG to the Bridgend Unitary Development Plan (UDP) in 2004.

The aim of the SA is to assess the effect of the SPG proposals from an environmental, economic and social perspective. It is intended to test the performance of the SPG against the objectives of sustainable development, and thereby provide the basis for its improvement.

This SAR summarises the findings and results of the SA process. The SA process involved three main stages:

- ◆ Identifying other relevant plans, programmes and sustainability objectives, establishing the sustainability baseline, identifying sustainability issues and problems and deciding SA objectives;
- ◆ Consulting on the scope of the sustainability appraisal; and
- ◆ Developing and refining options and assessing the effects of the SPG, identifying measures to reduce or counter act any negative effects and identifying significant effects that will form the basis for the establishment of a future monitoring programme.

An Appropriate Assessment (under the Habitats Regulations 1994) and an associated Hydrogeological Assessment have also been prepared to inform the development of the SPG.

Main Aims of the SPG

The development framework aims to:

- ◆ Realise the potential of Porthcawl's waterfront, centre and environs, as a focus for residents, visitors, shoppers and workers (Porthcawl represents a major regional tourism asset);
- ◆ Retain and reinforce the positive attributes of the area and enhance its attractiveness;
- ◆ Provide a flexible, but guiding, framework for both public and private investment;
- ◆ Establish planning guidance that will assist in establishing a consensus for change; and
- ◆ Provide for the safe and easy movement of people and goods to and within the town by foot, cycle and motor vehicles, while minimising the environmental impact of vehicular movements.

Sustainability Baseline and Key Issues

Establishing the sustainability baseline is a key component of the SA process. It provides the basis against which the effects of the plan are judged. Key issues which resulted from an analysis of the sustainability baseline for the Porthcawl area are as follows:

- ◆ There is a greater proportion of the population falling into the older age brackets and, more notably, a considerably lower proportion of the population aged below 16 compared to the Welsh average.
- ◆ Current housing stock exhibits a higher proportion of households living in semi-detached dwellings or flats than the Welsh averages. There are a considerably lower proportion of households living in detached accommodation.
- ◆ Decreasing numbers of children (aged under 16) has also contributed to an increase in surplus spaces in primary schools with three of the four local primaries having a combined total of 42 surplus spaces (38 of these are centred on one school) and the trend suggests that this will increase.
- ◆ There is a considerably higher proportion of the population with limiting long term illnesses than Wales; the number of households with one or more persons with limiting long term illness is also higher than the national average.
- ◆ The population of the town increases threefold in the peak summer tourist season, which is associated with increased incidences of criminal activity and fear of crime.
- ◆ Porthcawl is served by a range of bus services, however, there are considerable issues surrounding the integration of different modes of transport (i.e. bus and rail), which tend to make the private car a more appealing choice for longer distance journeys.
- ◆ Although no Designated Sites are located within the Porthcawl Development Area, two sites that make up the Kenfig Burrows Special Area of Conservation (SAC) are located close to the Development Area. These areas include the Kenfig Pools and Dunes SSSI and Merthyr Mawr Warren SSSI. These sites are also designated as National Nature Reserve (NNR) and Local Nature Reserve (LNR).
- ◆ Relict dunes are located at the western end of Sandy Bay within the Porthcawl Development Area. Coastal Sands Dunes are identified as a local and national Priority Habitat.
- ◆ A woodland park within the Porthcawl Development Area contains several trees with Tree Protection Orders and is invaluable for providing shelter and enclosure in an otherwise exposed setting.
- ◆ The waters around the Porthcawl Development Area at Sandy Bay, Trecco Bay and Rest Bay were compliant with the EU Bathing Water Directive and received a rating of 'excellent'.
- ◆ The Outer Bristol Channel North, which represents the coastal area of the Porthcawl Development Area, is classified as 'at risk' by the Environment Agency under the Water Framework Directive from physical or morphological alteration and alien species.
- ◆ A significant part of the Porthcawl Development Area foreshore is at risk from tidal flooding during a flood event (1 in 200 year return period). Flood defences currently provide protection to the eastern portion of the Development Area along the west of Newton Bay.

- ◆ The stretch of coast adjacent to the Porthcawl Development Area is being eroded, and this causes risk to the breakwater structure during high tides and storms. The SMP also identifies that most of the defences in the area are not adequate.
- ◆ The Porthcawl Development Area has a history of potentially contaminating land uses that may have introduced soil contamination to the area.
- ◆ The Porthcawl Conservation Area lies within the Porthcawl Development Area. Five listed buildings are located within the Porthcawl Conservation Area.
- ◆ There has been a lack of new businesses that have made a significant contribution to the local economy in terms of year round employment opportunities.
- ◆ Porthcawl is the principal tourism destination in Bridgend County Borough.
- ◆ The town retail rental values are relatively weak and the town suffers from competition, particularly for comparison shopping, from the nearby centres of Bridgend and McArthur Glen. The service sector is disproportionately dominant.
- ◆ There has sharp rise in unit vacancy rates from 4.5% in 2002 to 8.07% in 2005.
- ◆ The town does not currently have premises to attract and retain larger businesses. This is a particular issue in relation to convenience goods provision with a 2004 public opinion survey concluding that over 50% of those interviewed rating the choice of food shops in the town as poor or very poor.

Sustainability Appraisal Objectives

Following the review of relevant plans and programmes influencing the development of the Porthcawl Waterfront SPG and the sustainability baseline and the key environmental issues identified for the Porthcawl area, the following SA objectives have been developed using an iterative process taking into account comments from the previous scoping consultation.

Sustainability Appraisal Objectives
<p>Social</p> <p>To ensure the development area is fully accessible and well served by sustainable modes of transport.</p> <p>To ensure that the housing mix and choice in the development area reflects the needs of the local population, including the provision of affordable housing</p> <p>To promote safe environments and contribute to a reduction in the fear of crime.</p> <p>To promote community health and well being</p> <p>To ensure access to educational and training opportunities for all</p> <p>To enhance existing and promote the development of new high quality leisure, recreation and open space</p> <p>Environmental</p> <p>To ensure that new development takes into account the effects of climate change</p> <p>To reduce contamination and safeguard soil quality and quantity</p> <p>To make the best use of land in Porthcawl including re-use of previously developed land and existing buildings</p> <p>To protect and enhance biodiversity and geodiversity, including flora and fauna that are important on</p>

Sustainability Appraisal Objectives

an international, national and local scale

To maintain and improve the quality and quantity of ground waters and coastal and bathing waters

To reduce all forms of air pollution in the interests of local air quality and the integrity of the atmosphere

To reduce greenhouse gas emissions

To protect and enhance the quality and distinctiveness of the built and maritime environment in Porthcawl

To maximise efficiency of water use in new development

To promote the use of material and products produced by sustainable methods in the construction of new development

To minimise the need for energy, increase energy efficiency and to increase the use of renewable energy

To maintain and enhance the quality and character of the landscape, including its contribution to the setting and character of Porthcawl

To reduce the generation of waste and encourage re-use and recycling of waste in Porthcawl.

Economic

To ensure that development contributes to the vitality and viability of Porthcawl town centre

To maintain, promote and reinforce the role of Porthcawl as a tourist destination and district centre

To ensure that opportunities are provided to encourage a vibrant local economy, supporting diversification and entrepreneurship

Strategic Options

The 2004 SPG contained two broad options for the Porthcawl area: Option A - Enlarged Marina with Enlarged Food store and Option B - Reduced Marina with Enlarged Food store.

As a result of the Screening Exercise for the Appropriate Assessment and financial considerations, it was deemed by BCBC that it was not feasible to go ahead with the enlarged marina proposal. Option B has thus been selected; this contained three development areas with features as described below:

- ◆ Western development area
 - Harbour quarter – with improved harbour, leisure centre and public open space.
 - Commercial core – 50,000 sq. ft food store and car park, retail units and mixed use residential units of the seafront with enhanced eastern promenade providing a pedestrian and cycling route and flood defence.
 - Entrance gateway – signature building for the northern entrance to the town.
 - Western residential quarter – a variety of housing with building heights ranging from maximums of 3 to 6 storeys, taking advantage of the seafront/bay views.
- ◆ Central development area

-
- Residential, leisure and commercial quarter – mixed use retail/restaurant, office and residential buildings along the Sandy Bay Promenade with maximum building heights of 6 storeys, extended and enhanced Griffin Park extending from east to west across the development area and low density 2-3 storey residential units in the north of the area to integrate with existing development.
 - Sandy Bay Promenade – 10-11.5 m wide promenade providing a pedestrian and cycle route across the development area and linking the three development areas across the bay. The promenade will also provide flood defence with stepped revetments and sand covered block stone revetments on its seaward side.
 - ◆ Eastern development area
 - Eastern residential quarter – a range of residential units with higher density and building heights in the south decreasing in height and density back to 2-2.5 storey town houses in the north to integrate with existing development. Will also feature areas of public open space.
 - Foreshore park – integration of the built environment with the natural environment, this character area contains some residential buildings, high density and highest building heights (maximum 6 storey) but dominated by the soft landscaping of the park abutting the Bay.

Assessment of Significant Effects of the Porthcawl Waterfront SPG

The Porthcawl Waterfront SPG divided the regeneration area into three distinct development areas. These same boundaries were adopted for the purposes of the SA/SEA.

Sustainability Assessment Results

Overall, the SPG is likely to have significant positive effects on most social and economic SA/SEA objectives, with significant positive effects predicted on:

- ◆ Improving accessibility and sustainable transport;
- ◆ Housing mix and affordability;
- ◆ Safe environments, reducing crime and the fear of crime;
- ◆ Health and well being;
- ◆ Access to education and training;
- ◆ Leisure, recreation and open space;
- ◆ Contaminated land and soil quality;
- ◆ Best use of land and existing buildings;
- ◆ Protecting and enhancing biodiversity and geodiversity;
- ◆ Creating a vibrant economy;
- ◆ Promoting Porthcawl as a tourist destination; and
- ◆ Improving the vitality and viability of Porthcawl.

However, the assessment also identified the potential for negative and a range of positive/negative effects on the objectives relating to:

- ◆ The effects of climate change;

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- ◆ Quality and quantity of ground water and bathing waters;
 - ◆ Air pollution;
 - ◆ Greenhouse gas emissions;
 - ◆ Built and marine environment;
 - ◆ Efficient use of water;
 - ◆ Energy use and renewable energy;
 - ◆ Landscape; and
 - ◆ Waste generation.

Mitigation Measures

The following mitigation measures are suggested to reduce negative effects of the SPG:

- ◆ Noise control measures should be implemented as set out in BS5228-1 during construction activities;
- ◆ General pollution control measures during construction activities to avoid water and air contamination;
- ◆ Sustainable Urban Drainage Systems (SUDS) should form part of site drainage, unless all types of SUDS techniques are unsuitable. It must be ensured that contaminants remaining in the soil are not mobilised: infiltration-based techniques (e.g. soakaways) may not be appropriate in contaminated land, in which case attenuation/evaporation techniques (e.g. lined swales, green roofs) are likely to be suitable.

Recommendations for Improvements to the Porthcawl Waterfront SPG

The following recommendations are made to reduce negative effects and improve the overall sustainability performance of the Porthcawl Waterfront SPG:

- ◆ Biodiversity enhancements such as tree planting and measures to integrate biodiversity into new development such as green roofs or roof gardens, should be encouraged throughout the regeneration area;
- ◆ All new development should be required to reduce water consumption by 25% when compared to standard levels;
- ◆ SUDS should be actively promoted through the SPG;
- ◆ The requirement to remediate areas of contaminated land should be clearly specified;
- ◆ The provision of segregated recycling bins in the public realm should be encouraged to achieve recycling targets;
- ◆ All new development should be required to source 10% of their energy requirements from renewable energy;
- ◆ Greater encouragement of recycled/reclaimed materials should be encouraged for paving and street furniture.

It is recommended that the Draft Version of the Porthcawl Waterfront SPG is updated to reflect the recommendations above.

Monitoring of Significant Effects

The SA/SEA has identified the following significant effects arising from the implementation of the SPG that will form the basis of the monitoring programme:

- ◆ Effect on accessibility and sustainable modes of transport (positive)
- ◆ Effect on housing mix and choice, including the provision of affordable housing (positive)
- ◆ Effect on creating safe environments and reducing fear of crime (positive)
- ◆ Effect on improving health and well being (positive)
- ◆ Effect on enhancing existing and promoting development of new high quality leisure, recreation and open space (positive)
- ◆ Effect on ensuring that new development takes into account the effects of climate change (positive)
- ◆ Effect on reducing soil contamination (positive)
- ◆ Effect on making the best use of land in Porthcawl including re-use of previously developed land and existing buildings (positive)
- ◆ Effect on protecting and enhancing biodiversity and geodiversity (positive)
- ◆ Effect on the need for energy, energy efficiency and the use of renewable energy (positive)
- ◆ Effect on encouraging a vibrant local economy, supporting diversification and entrepreneurship (positive)
- ◆ Effect on promoting and reinforcing the role of Porthcawl as a tourist destination and district centre (positive)
- ◆ Effect on the vitality and viability of Porthcawl town centre (positive)

Conclusion

The Porthcawl SPG has been the subject of a Sustainability Appraisal incorporating Strategic Environmental Assessment and significant positive effects have been identified.

The findings of this assessment conclude that the sustainability performance of the SPG could be further improved by taking account of the recommendations contained within this report.

1. Introduction

BACKGROUND

- 1.1 This document is the Sustainability Appraisal Report for the Sustainability Appraisal (SA), incorporating Strategic Environmental Assessment (SEA), of the Porthcawl Waterfront Supplementary Planning Guidance (SPG), located in Bridgend County Borough Council (BCBC).
- 1.2 A Development Framework Plan for the Porthcawl Regeneration Area was approved following public consultation by BCBC and adopted as an SPG to the Bridgend Unitary Development Plan (UDP) in 2004. The Development Framework Plan was subject to Sustainability Appraisal.
- 1.3 The 2004 adopted SPG envisaged a marina in the former dock in Salt Lake. Subsequent work indicated, however, that this location was unviable. Two alternatives were consequently identified, which comprised a new marina within a new breakwater to the east of the Eastern Promenade or a simple refurbishment of the existing outer basin.
- 1.4 The draft Porthcawl Waterfront SPG has been prepared by Halcrow/CDN Planning to provide detailed planning guidance to developers on the design requirements and will be adopted as SPG by BCBC. It builds on and updates the SPG published for the area in 2004 and will replace the SPG when adopted.
- 1.5 The Porthcawl Waterfront SPG contains design guidance on the following key topics:
 - ◆ Road Hierarchy;
 - ◆ Pedestrian and Cycle Links;
 - ◆ Bus Routes and Stops;
 - ◆ Car Parking;
 - ◆ Residential Density;
 - ◆ Urban Form;
 - ◆ Mixed Use; and
 - ◆ Open Space;
- 1.6 To ensure high quality attractive development, the SPG contains additional detailed design guidance on:
 - ◆ Paving Materials;
 - ◆ Lighting;
 - ◆ Street Furniture;
 - ◆ Planting Design;
 - ◆ Public Art;
 - ◆ Natural Surveillance;
 - ◆ Refuse Storage; and

◆ Sustainability and Energy Efficiency

- 1.7 Atkins was commissioned in November 2006 by Bridgend County Borough Council to undertake a Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) of the Porthcawl Waterfront SPG.
- 1.8 Atkins was also commissioned to establish whether a formal Appropriate Assessment (AA) was required for the Porthcawl Waterfront SPG, due to the proximity of the Kenfig/Cynfigg Special Area of Conservation (SAC). An AA screening exercise and a hydrogeological assessment have been undertaken to assist in the identification of most sustainable options.

STUDY AREA

- 1.9 The site, referred to as the Porthcawl Development Area, is located between the Harbour and Trecco Bay Caravan Park, and comprises a large area of land in a prominent sea front position (as shown in Figure 1.1). A variety of land uses currently occupy the site including the harbour, an area of open space/recreation facilities, a fun fair and a former municipal caravan park. However, much of the area is currently run down and under-utilised. The development area is designated within the UDP as a 'key regeneration site...offering a unique development opportunity contributing to the wider regeneration of Porthcawl.'

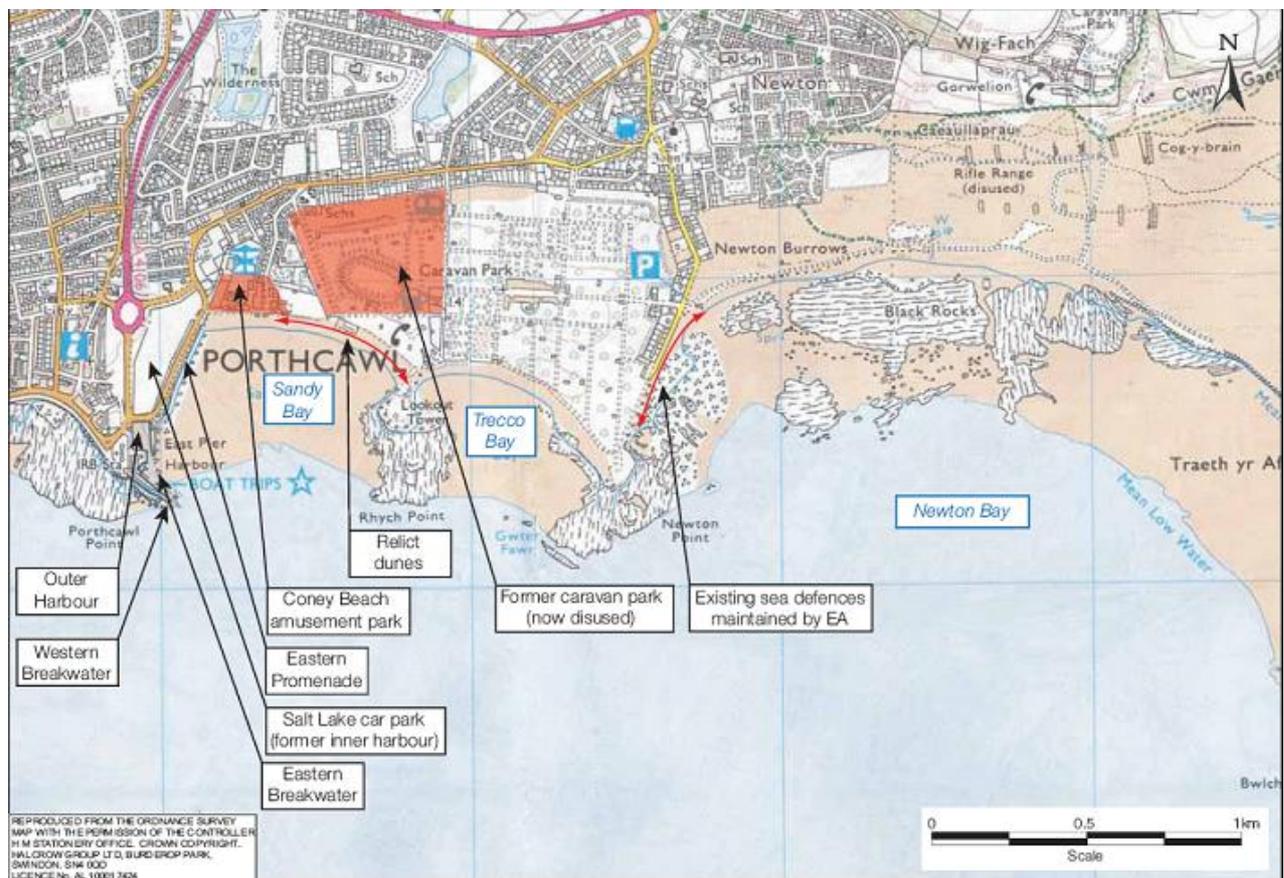
Figure 1.1 - Porthcawl Development Area



Source: Porthcawl Development Framework, Bridgend County Borough Council.

- 1.10 Key features of the Porthcawl Development Area and its surroundings are illustrated in Figure 1.2.

Figure 1.2 - Porthcawl Development Area – Key Features



Source: Porthcawl Marina and Coast Protection Study Volume 4, Halcrow Group Limited.

THE VISION FOR PORTHCAWL DEVELOPMENT AREA

1.11 The vision is set in the August 2007 Draft Porthcawl Waterfront SPG is as follows:

“The regeneration of the waterfront is a key element in the future development of Porthcawl as a premier seaside resort. This will be achieved through a combination of quality design of buildings and the surrounding environment, comprising residential, leisure, cultural, tourism and retail uses. Central to this will be a revitalised harbour area incorporating the reuse of historic buildings, new leisure facilities and a fully refurbished harbour set within a prestigious and vibrant waterfront.”

AIMS OF THE SPG

1.12 The role and benefits of the Planning Guidance were set out in the 2004 SPG document and remain unchanged. These are:

- ◆ Realise the potential of Porthcawl’s waterfront, centre and environs, as a focus for residents, visitors, shoppers and workers (Porthcawl represents a major regional tourism asset);

-
- ◆ Retain and reinforce the positive attributes of the area and enhance its attractiveness;
 - ◆ Provide a flexible, but guiding, framework for both public and private investment;
 - ◆ Establish planning guidance that will assist in establishing a consensus for change; and
 - ◆ Provide for the safe and easy movement of people and goods to and within the town by foot, cycle and motor vehicles, while minimising the environmental impact of vehicular movements.

REQUIREMENT FOR STRATEGIC ENVIRONMENTAL ASSESSMENT

- 1.13 The EU Directive 2001/42/EC on assessment of effects of certain plans and programmes on the environment (the 'SEA Directive') came into force in the UK on 20 July 2004 through the Environmental Assessment of Plans and Programmes Regulations 2004. The Directive applies to a variety of plans and programmes including those for town and country planning and land use and applies to both Local Development Plans (LDP's) and Supplementary Planning Guidance (SPG) as they a) set the framework for future development consent and b) are likely to have a significant effect on the environment.
- 1.14 The overarching objective of the SEA Directive is:
- "To provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans... with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans... which are likely to have significant effects on the environment."* (Article 1)
- 1.15 SEA is an iterative assessment process which plans and programmes are now required to undergo as they are being developed to ensure that potential significant environmental effects arising from the plan/programme are identified, assessed, mitigated and communicated to plan-makers. SEA also requires the monitoring of significant effects once the plan/programme is implemented.
- 1.16 The SEA Directive and the SEA Regulations state that the SEA must consider the following topic areas.
- ◆ Biodiversity;
 - ◆ Population;
 - ◆ Human Health;
 - ◆ Flora and Fauna;
 - ◆ Soil;
 - ◆ Water;
 - ◆ Air;
 - ◆ Climatic Factors;
 - ◆ Material assets;

-
- ◆ Cultural heritage, including archaeological and built heritage;
 - ◆ Landscape; and
 - ◆ And the interrelationship between these factors.

REQUIREMENT FOR SUSTAINABILITY APPRAISAL

- 1.17 Under the regulations implementing the provisions of the Planning and Compulsory Purchase Act 2004, a Sustainability Appraisal (SA) is mandatory for all LDPs. The Regulations stipulate that SAs of LDPs should meet the requirements of the EU Directive 2001/42/EC on assessment of effects of certain plans and programmes on the environment (the 'SEA Directive'). The Local Development Plan Manual states that the requirement for an SA may apply to an SPG, even though it is not mandatory. As the SPG in this case could potentially lead to 'significant environmental effects', as it will supersede the existing Development Framework Plan, it was determined that SA was necessary in this case. The purpose of SA is to promote sustainable development through better integration of sustainability considerations in the preparation and adoption of plans.
- 1.18 The approach taken to the SA has taken account the various sources of guidance currently available, and is compliant with the SEA Directive as well as the SA requirements from planning legislation.

THE SA/SEA PROCESS

- 1.19 The requirements to carry out SA and SEA are distinct, but the Welsh Assembly Government (WAG) guidance (WAG, 2005) for Local Development Plans concurs with the ODPM¹ (ODPM, 2005) guidance in stating that it is possible to satisfy both through a single appraisal process (henceforth designated as SA/SEA) and provides methodologies and guidance for doing so. The same approach has been taken to the assessment of the Porthcawl Waterfront SPG.
- 1.20 The WAG guidance considers that SA is undertaken in the following main stages:
- ◆ Stage A – Setting the context and objectives, establishing the baseline and deciding on scope;
 - ◆ Stage B – Developing and refining options and assessing effects;
 - ◆ Stage C – Preparing the Sustainability Appraisal Report;
 - ◆ Stage D – Consultation on the preferred options of the draft plan and the Sustainability Appraisal Report;
 - ◆ Stage E – Monitoring implementation of the plan.
- 1.21 The guidance also requires the preparation of the following reports:
- ◆ Scoping Report (summarising Stage A work), which should be used for consultation on the scope of the SA/SEA;
 - ◆ Sustainability Appraisal Report (documenting Stages A to C work), which should be used in the public consultation on the Preferred Options.

¹ Now Communities and Local Government (CLG).

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- 1.22 Figure 1.3 sets out the various stages, tasks and relationships with the plan preparation contained in the WAG/ODPM guidance, which are being applied to the Sustainability Appraisal of the SPG.

Figure 1.3 - Incorporating SA within the SPG Process – Stages and Tasks

Figure 9 – Incorporating SA within the SPD process	
SPD Stage 1: Pre-production – Evidence gathering	
SA stages and tasks	
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope	
<ul style="list-style-type: none"> • A1: Identifying other relevant policies, plans and programmes, and sustainable development objectives. • A2: Collecting baseline information. • A3: Identifying sustainability issues and problems. • A4: Developing the SA framework. • A5: Consulting on the scope of the SA. 	
SPD Stage 2: Production – Prepare draft SPD	
SA stages and tasks	
Stage B: Developing and refining options and assessing effects	
<ul style="list-style-type: none"> • B1: Testing the SPD objectives against the SA framework. • B2: Developing the SPD options. • B3: Predicting the effects of the draft SPD. • B4: Evaluating the effects the draft SPD. • B5: Considering ways of mitigating adverse effects and maximising beneficial effects. • B6: Proposing measures to monitor the significant effects of implementing the SPD. 	
Stage C: Preparing the Sustainability Appraisal Report	
<ul style="list-style-type: none"> • C1: Preparing SA Report. 	
Stage D: Consulting on draft SPD and Sustainability Appraisal Report	
<ul style="list-style-type: none"> • D1: Public participation on the SA Report and the draft SPD. • D2: Assessing significant changes. 	
SPD Stage 3: Adoption	
SA stages and tasks	
<ul style="list-style-type: none"> • D3: Making decisions and providing information. 	
Stage E: Monitoring the significant effects of implementing the SPD	
<ul style="list-style-type: none"> • E1: Finalising aims and methods for monitoring. • E2: Responding to adverse effects. 	

Source: Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents, ODPM, November 2005.

SA AND CONSULTATION

- 1.23 The requirements for whom to consult during a Sustainability Appraisal (incorporating SEA) are as follows:
- ◆ Authorities which, because of their environmental responsibilities, are likely to be concerned by the effects of implementing the plan or programme, must be consulted on the scope and level of detail of the information to be included in the Sustainability Appraisal Report (commonly referred to as Scoping Report consultation). The authorities concerned are the Countryside Council for Wales (CCW), Environment Agency (Wales) and CADW (Historic Environment Service of the Welsh Assembly Government); and
 - ◆ The public and Consultation Bodies must be consulted on the draft plan or programme and the Sustainability Appraisal Report.
- 1.24 The consultation timetable for the preparation of the BCBC SPG and its Sustainability Appraisal is set out in Table 1.1.

Table 1.1 - Consultation Timetable for the SPG and its Sustainability Appraisal

Consultation	Date
Sustainability Appraisal Scoping Report	23 Jan – 27 Feb 2007
SPG and Sustainability Appraisal Report	20 Aug – 1 st October

- 1.25 The period of consultation on the Scoping Report was from 23 January 2007 to 27 February 2007 in accordance with Regulation 12 (6) of the Environmental Assessments of Plans and Programmes Regulations 2004.
- 1.26 The three main statutory consultation bodies: CCW, Environment Agency (Wales) and CADW were formally consulted in accordance with the SEA Directive.
- 1.27 The aim of the consultation on the Scoping Report was to involve and engage with statutory consultees and other key stakeholders on the scope of the appraisal. In particular, it sought advice on:
- ◆ The appropriateness of the sustainability objectives;
 - ◆ The appropriateness of the key sustainability issues;
 - ◆ The comprehensiveness of the baseline data and need to gain further information where appropriate.
- 1.28 Appendix A summarises the main consultee comments on the Scoping Report and indicates how these comments have been addressed in the preparation of this Sustainability Appraisal Report.

PURPOSE OF THE SUSTAINABILITY APPRAISAL REPORT

- 1.29 The requirement to prepare a Sustainability Appraisal Report arises directly from Article 5.1 of the SEA Directive which states that:

'An Environmental Report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.'

- 1.30 In SA the Sustainability Appraisal Report replaces the Environmental Report as required under the SEA Directive.
- 1.31 This Sustainability Appraisal Report reports on the work undertaken during the initial stages of the SA process and takes the process further by reporting on the significant social, environmental and economic effects of the preferred proposals outlined in the SPG, proposed mitigation measures and proposals for monitoring significant sustainability effects and accompanies the final draft of the Porthcawl Waterfront SPG during public consultation.

2. Sustainability Appraisal Methodology

MEETING THE REQUIREMENTS OF THE SEA DIRECTIVE

- 2.1 As mentioned in Chapter 1 there is a fundamental difference between the SA and SEA methodologies. SEA is primarily focused on environmental effects and the methodology addresses a number of topic areas namely Biodiversity, Population, Human Health, Flora and Flora, Soil, Water, Air, Climatic Factors, Material Assets, Cultural Heritage and Landscape and the interrelationship between these topics. SA, however, widens the scope of the appraisal to include social and economic topics as well as environmental. This complies with the WAG's definition of sustainable development which is to:

“Promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs. By this we mean the needs of all human life, within the carrying capacity of supporting ecosystems, without compromising the ability of future generations to meet their own social, economic, environmental and cultural needs.”

- 2.2 This Sustainability Appraisal has been undertaken so as to meet the requirements of the SEA Directive for environmental assessment of plans. Table 2.1 sets out the way the specific SEA requirements have been met in this report.

Table 2.1 - Schedule of SEA Requirements

Requirements of the Directive	Where Covered in Report
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is:	
a) An outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes	Chapters 3 and 5
b) The relevant aspects of the current state of the environment and the likely evolution without implementation of the plan or programme	Chapter 3, Appendix B
c) The environmental characteristics of areas likely to be significantly affected	Chapter 3, Appendix B
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directive 79/409/EEC and 92/43/EEC	Chapter 3, Appendix B
e) The environmental protection objectives established at international, community or national level which are	Chapter 3

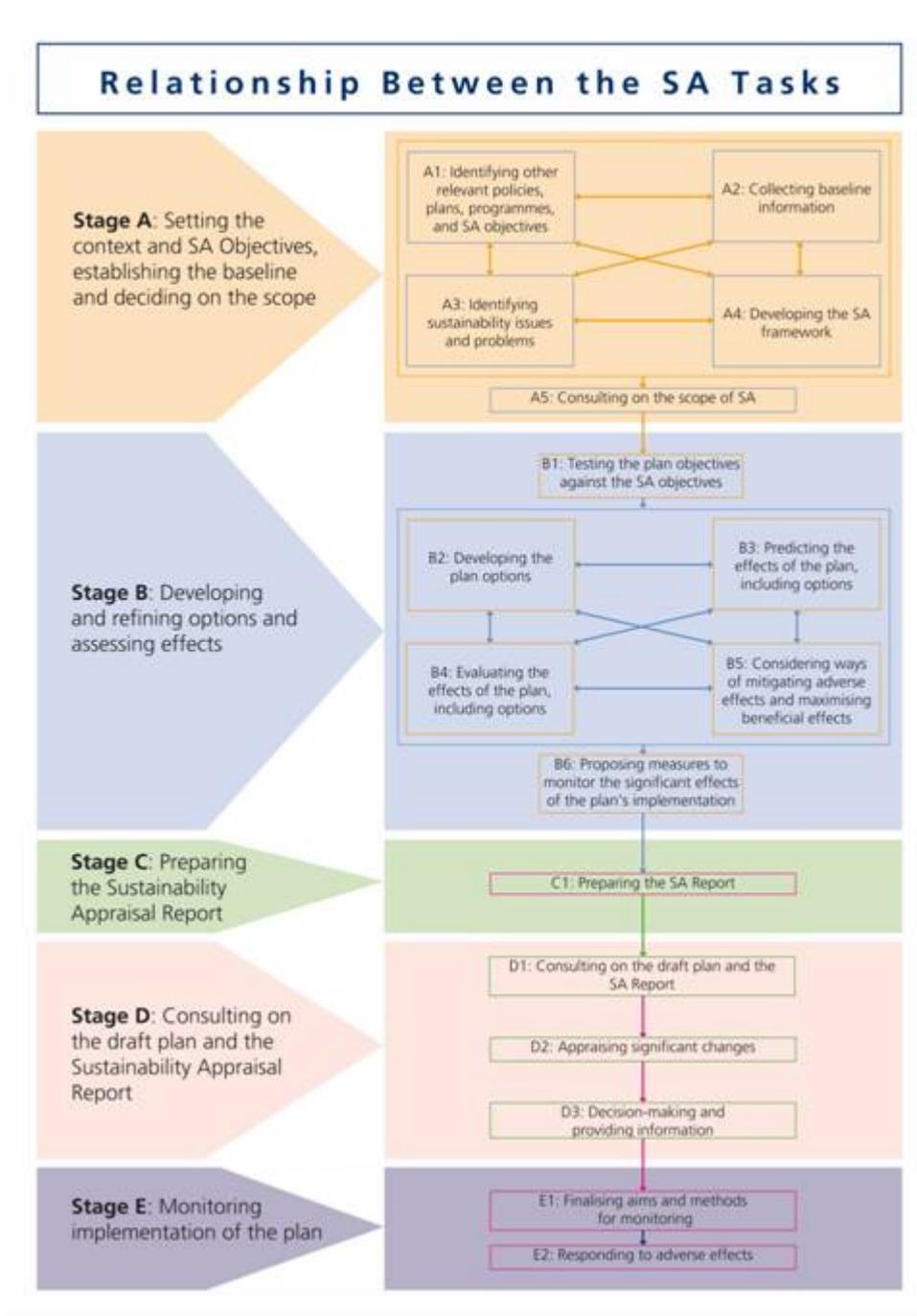
Requirements of the Directive	Where Covered in Report
relevant to the programme and the way those objectives and any environmental considerations have been taken into account during its preparation	
f) The likely significant effects on the environment, including: short, medium and long term; permanent and temporary; positive and negative; secondary, cumulative and synergistic effects on issues such as: biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Chapter 5 and Appendix D
g) The measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse effects on the environment of implementing the plan or programme.	Chapter 6
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	Chapters 1 and 4
i) A description of measures envisaged concerning monitoring (in accordance with regulation 17)	Chapter 7
j) A non-technical summary of the information provided under the above headings	Non-technical summary
Consultation with:	
Authorities with environmental responsibility when deciding on the scope and level of detail of the information to be included in the environment report	Chapter 1 and Appendix A
Authorities with environmental responsibility and the public to be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan and accompanying environmental report before its adoption	Consultation on this SA Report
Other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country	Not applicable
Taking the environmental report and the results of the consultations into account in decision making	
Provision of information on the decision: When the plan or programme is adopted the public and any countries consulted must be informed and the following made available: The plan or programme as adopted A statement summarising how environmental considerations have been integrated into the plan or	To be addressed at a later date

Requirements of the Directive	Where Covered in Report
programme in accordance with the requirements of the legislation The measures decided concerning monitoring	
Monitoring of the environmental effects of the plan or programmes implementation must be undertaken	To be addressed at a later date

APPRAISAL METHODOLOGY

- 2.3 WAG guidance emphasises that SA is an iterative process that identifies and reports on the likely significant effects of the plan and the extent to which the implementation of the plan will achieve the social, environmental and economic objectives by which sustainable development can be defined. The intention is that SA is fully integrated into the plan-making process from the earliest stages, both informing and being informed by it.
- 2.4 The methodology adopted involved the completion of the SA stages A, B and C and associated tasks as outlined in Figure 2.1 below.

Figure 2.1 - Relationship between SA Stages and Tasks



Source: Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents, ODPM, November 2005.

Stage A: Setting the Context and Objectives, Establishing Baseline and Deciding on Scope

A1: Other Relevant Plans and Programmes

2.5 A wide range of plans, programmes and policies (PPPs) were identified in the Scoping Report for the SA of the Bridgend County Council LDP and are set out

therein. International, national, regional and borough level policies have already influenced the broad SA framework developed for the Scoping Report for the SA of the Bridgend County Council LDP and thus the appropriate sustainability themes have been captured in terms of deriving SA objectives to inform the SA framework. This first task on this SA has thus focussed on the review of local plans, programmes and policies relevant to the Porthcawl SPG and these are shown in Table 3.1.

A2: Baseline Data

- 2.6 To predict accurately how the SPG proposals will affect the environment, and social and economic factors, it is first important to understand the current state of these factors and then examine their likely evolution without the implementation of the plan.
- 2.7 Baseline data tables (Appendix B) have been prepared where data have been listed under social, environmental and economic groupings. These tables record:
- ◆ General indicator;
 - ◆ Quantified data within the plan area;
 - ◆ Comparators and targets (if applicable);
 - ◆ Problems/constraints; and
 - ◆ Source of the information.
- 2.8 Baseline information provides the basis for predicting and monitoring effects and helps to identify sustainability problems and alternative ways of dealing with them. Sufficient information about the current and likely future state of the development area is required to allow the SPG effects to be adequately predicted.
- 2.9 The ODPM guidance emphasises that the collection of baseline data and the development of the SA framework should inform each other. The review and analysis of relevant plans and programmes has also influenced data collection. In deciding what and how much baseline data to collect, the key determining factor has been the level of detail required to appraise the plan against the SA objectives.
- 2.10 A set of baseline data has been extracted from a wide range of available publications and datasets. Sources have included, among others, national government and government agency websites, census data, and the Office for National Statistics. No primary research has been conducted. To provide the level of detail required for the SA of the SPG, data available specifically for Porthcawl has been used, in particular local economic and social indicators.

A3: Sustainability Issues

- 2.11 Analysis of key sustainability issues relevant to the development area has been carried out. This work has been based on the review of relevant plans and programmes and an analysis of the baseline data.
- 2.12 The results were set out in a table under the three sustainable development dimensions (economic, social and environmental) and covered the most relevant topics.

A4: Sustainability Appraisal Framework

- 2.13 A set of objectives, indicators and targets against which the proposals in the SPG can be assessed was drawn up under the three sustainable development dimensions: social, economic and environmental.
- 2.14 These were developed using an iterative process, based on the review of relevant plans and programmes, the evolving baseline and developing analysis of key sustainability issues.
- 2.15 A table has been prepared setting out the SA Framework and identifying how relevant SEA Directive topic(s) have been covered. The SA objectives were refined and amended to reflect where appropriate, the comments from the statutory consultees on the Scoping Report.

A5: Consulting on the Scope of the Sustainability Appraisal

- 2.16 At this stage BCBC sought the views from the statutory consultation bodies and others on the scope and level of detail of the ensuing Sustainability Appraisal Report. A Scoping Report for the SA of the Porthcawl Waterfront SPG was prepared to that effect. The consultation comments have influenced and helped shape the Sustainability Appraisal Report.

Stage B: Developing and Refining Options***B1: Testing the SPG Objectives against the Sustainability Appraisal Framework***

- 2.17 A compatibility assessment of the SPG objectives against the SA Objectives was undertaken as part of the iterative process to assess the sustainability of the SPG objectives. This was undertaken to ensure that the overall objectives of the SPG were in accordance with the SA objectives and identify potential areas for further investigation as part of the detailed sustainability appraisal assessments.

B2: Developing the SPG Options

- 2.18 The Appropriate Assessment Screening carried out to meet the requirements of the Habitats Regulations, played a key role in the refining of options by BCBC. The results are discussed in Section 5 and Appendix C.

B3: Predicting the Effects of the SPG

- 2.19 The methodology that has been adopted for this assessment is generally broad-brush and qualitative which is generally accepted as good practice by the SA guidance.
- 2.20 The assessment of the SPG has been broken down into 'prediction' of effects, 'evaluation' of effects and 'mitigation' of effects.
- 2.21 The prediction of effects involved the identification of the potential changes to the sustainability baseline conditions which were considered to arise from the specific proposal being implemented by the SPG. The predicted effects were then described in terms of their nature and magnitude using the following parameters:

-
- ◆ Geographical scale;
 - ◆ Probability of the effect occurring;
 - ◆ Timing of effect – short, medium, long term;
 - ◆ Duration of effect – temporary or permanent;
 - ◆ Nature of effect – positive, negative or neutral; and
 - ◆ Secondary, cumulative and/or synergistic effects.
- 2.22 The prediction of effects was undertaken for each character area being implemented through the SPG against the SA Framework.

B4: Evaluating the Effects of the SPG

- 2.23 The next stage of the assessment involved the evaluation of the significant effects. The evaluation involved forming a judgement on whether or not the predicted effects will be environmentally significant. The technique that has primarily been used to assess the significance of effects in this assessment is a qualitative assessment based on expert judgement. Other techniques included consultation with stakeholders involved in the SA process, geographical information systems and reference to key legislation, primarily the Strategic Environmental Assessment of Plans and Programmes Regulations 2004 and Environmental Impact Assessment Regulations 1999.
- 2.24 As with the prediction of the effects, the criteria of assessing the significance of a specific effect used in this assessment, as outlined in Annex II of the SEA Directive, has been based on the following parameters to determine the significance:
- ◆ Scale;
 - ◆ Permanence;
 - ◆ Nature and sensitivity; and
 - ◆ Cumulative effects.
- 2.25 In the current practice of sustainability appraisals, the broad-brush qualitative prediction and evaluation of effects is based on a qualitative seven point scale in easily understood terms. In general, this assessment has adopted the scale set in Table 2.2 to assess the significance of effects of the SPG proposals.

Table 2.2 - Criteria for Assessing Significance of Effects

Assessment Scale	Significance of Effect/Appraisal Category
+++	Strongly positive
++	Moderately positive
+	Slightly positive
0	Neutral or no obvious effect
-	Slightly negative
--	Moderately negative

Assessment Scale	Significance of Effect/Appraisal Category
---	Strongly negative

2.26 Moderately and strongly positive and negative effects have been considered of significance whereas neutral and slightly positive and negative effects have been considered non-significant.

SECONDARY AND CUMULATIVE EFFECTS ASSESSMENTS

2.27 Annex I of the SEA Directive requires that the assessment of effects include secondary, cumulative and synergistic effects.

2.28 Secondary or indirect effects are effects that are not a direct result of the plan, but occur away from the original effect or as a result of the complex pathway e.g. a development that changes a water table and thus affects the ecology of a nearby wetland. These effects are not cumulative and have been identified and assessed primarily through the examination of the relationship between various objectives during the Assessment of Environmental Effects.

2.29 Cumulative effects arise where several proposals individually may or may not have a significant effect, but in-combination have a significant effect due to spatial crowding or temporal overlap between plans, proposals and actions and repeated removal or addition of resources due to proposals and actions. Cumulative effects can be:

- ◆ Additive- the simple sum of all the effects;
- ◆ Neutralising- where effects counteract each other to reduce the overall effect;
- ◆ Synergistic- is the effect of two or more effects acting together which is greater than the simple sum of the effects when acting alone. For instance, a wildlife habitat can become progressively fragmented with limited effects on a particular species until the last fragmentation makes the areas too small to support the species at all.

2.30 Many environmental problems result from cumulative effects. These effects are very hard to deal with on a project by project basis through Environmental Impact Assessment. It is at the SA level that they are most effectively identified and addressed.

2.31 Cumulative effects assessment is a systematic procedure for identifying and evaluating the significance of effects from multiple activities. The analysis of the causes, pathways and consequences of these effects is an essential part of the process.

2.32 Cumulative (including additive, neutralising and synergistic) effects have been considered throughout the entire SA process, as described below:

- ◆ As part of the review of relevant strategies, plans and programmes and the derivation of draft SA objectives, key receptors have been identified which may be subject to cumulative effects.
- ◆ In the process of collecting baseline information cumulative effects have been considered by identifying key receptors (e.g. specific wildlife habitats) and

information on how these have changed with time, and how they are likely to change without the implementation of the SPG. Targets have been identified (where possible), that identify how close to capacity the key receptor is, which is a key determining factor in assessing the likelihood of cumulative and synergistic effects occurring, and their degree of significance.

- ◆ Through the analysis of environmental issues and problems, receptors have been identified that are particularly sensitive, in decline or near to their threshold (where such information is available).
- ◆ The development of SA objectives, indicators and targets has been influenced by cumulative effects identified through the process above and SA objectives that consider cumulative effects have been identified.
- ◆ The likely cumulative effects of the strategic alternatives have been identified which highlighted potential cumulative effects that should be considered later in the SA process.
- ◆ Testing the consistency between the SPG and SA objectives has highlighted the potential for cumulative effects against specific SPG objectives.

B5: Considering Ways of Mitigating Adverse Effects and Maximising Beneficial Effects

- 2.33 Mitigation measures have been identified during the evaluation process to reduce the scale/importance of significant negative effects.

B6: Proposing Measures to Monitor the Significant Effects of Implementing the SPG

- 2.34 SA monitoring involves measuring indicators which will enable the establishment of a causal link between the implementation of the plan and the likely significant effect (positive or negative) being monitored. It thus helps to ensure that any adverse effects which arise during implementation, whether or not they were foreseen, can be identified and that action can be taken by BCBC to deal with them.

Stage C: Preparing the Sustainability Appraisal Report

- 2.35 This document is the Sustainability Appraisal Report.

3. Developing the Sustainability Appraisal Framework

INTRODUCTION

- 3.1 The development of a SA Framework is a key component in completing the SA by synthesising objectives relevant to the SA, the baseline information and sustainability issues into a systematic and easily understood tool that allows the prediction and assessment of effects arising from the SPG.

OTHER RELEVANT PLANS AND PROGRAMMES

- 3.2 The first task of a SA is the identification of other relevant plans, programmes and sustainability objectives. An SPG may be influenced in many ways by other plans and programmes and by external sustainability objectives, such as those laid down in policies and legislation. This task is carried out in response to the requirements of the SEA Directive which specifically states that the Environmental Report should provide information on:

“The plan’s relationship with other relevant plans and programmes” and “the environmental protection objectives, established at international, [European] 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” (Annex 1 (a), (e))

- 3.3 A wide range of PPPs were identified in the Scoping Report for the SA of the BCBC LDP. These are set out in the relevant section of the LDP SA Scoping Report. This first task has thus focussed on the review of local plans, programmes and policies relevant to the Porthcawl Development Area, and these are shown in Table 3.1
- 3.4 In terms of the derivation of SA objectives to inform the SA framework, the international, national, regional wide level policies have already influenced the broad SA framework developed for the LDP SA Scoping Report, and thus the appropriate sustainability themes have been captured.

Table 3.1 - Relevant Plans and Programme

Local Plans and Strategies
Bridgend County Borough Council UDP Adopted May 2005
Bridgend County Borough Council Corporate Plan 2002 – 2005
Bridgend Education, Leisure & Community Services
Revised Countryside Strategy for Bridgend County Borough 2002-2007
Revised Integrated Action Programme for Bridgend County Borough 2002-2003
Local Biodiversity Action Plan For Bridgend County Borough

Local Plans and Strategies
Bridgend County Borough Council Policy Statement On Flood And Coastal Defence
Bridgend Local Housing Strategy 2004
Bridgend County Borough Community Strategy 2005 - 2016
Porthcawl Development Framework 2004
Kenfig/Cynffig Special Area Of Conservation (SAC) Site Issue Briefing

RESULTS OF ANALYSIS

- 3.5 The analysis of County wide and local PPPs has confirmed social, environmental and economic objectives of relevance as well as sustainability issues that might influence the development of the Porthcawl Waterfront SPG.
- 3.6 Two documents were found that apply solely to the Porthcawl area. These are the adopted Porthcawl Development Framework (which is being replaced by the Porthcawl Waterfront SPG) and the Porthcawl Marina and Coastal Protection Study. Analysis of these documents has been used to confirm the relevance of the SA objectives identified in the LDP SA Scoping Report, these are listed below:
- ◆ To ensure an increase in accessibility to opportunities, transport and to all services and information in the County Borough;
 - ◆ To provide the opportunity for people to meet their housing needs;
 - ◆ To improve overall levels of health and safety, including the sense of security, for all in the County Borough;
 - ◆ To maintain, promote and where suitable enhance, the distinctive character of the communities of Bridgend;
 - ◆ To maintain and enhance the diversity and abundance of species, and safeguard areas of significant nature conservation value;
 - ◆ To maintain and enhance the quality and character of the landscape, including its contribution to the setting and character of settlements;
 - ◆ To maintain and enhance the quality of the built environment, including the cultural/historic heritage;
 - ◆ To reduce all forms of air pollution in the interests of local air quality and the integrity of the atmosphere;
 - ◆ To ensure that new development takes into account the effects of climate change;
 - ◆ To maintain and improve the quality and quantity of ground waters, river waters and coastal and bathing waters;
 - ◆ To use land efficiently, retaining undeveloped land and bringing damaged land back into use;
 - ◆ To maintain the stock of minerals and non renewable primary resources;
 - ◆ To increase the opportunities for energy generation from renewable energy sources;

-
- ◆ To ensure that there is a vibrant local economy which is at the forefront of a wider regional economy and provide diversity of employment within the County Borough and support a culture of entrepreneurship; and
 - ◆ To achieve a clear connection between effort and benefit, by making the most of local strengths, seeking community regeneration, and fostering economic activity.

BASELINE INFORMATION

3.7 The next task in the SA covers the collection of baseline information. The review of other plans and programmes undertaken previously has also provided a considerable amount of baseline information and this information has been complemented by collection of data on key indicators relating to the SEA topic areas, as well as additional social and economic indicators for the Porthcawl Development Area.

3.8 More specifically, the SEA Directive says that the Environmental Report should provide information on:

“relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan” and the “environmental characteristics of the areas likely to be significantly affected” (Annex I (b) (c)) and

“any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC (Birds Directive) and 92/43/EEC (Habitats Directive)” (Annex I (c))

Socio-Economic Data

3.9 To provide the level of detail required for the SA, data, in particular for local economic and social indicators, have been collected for the Porthcawl area. Where localised data for the statistical areas of the town, which are described in Figure 3.1, have proved to be unavailable, county and regional level data have been used.

Figure 3.1: Administrative Boundaries for Porthcawl

Electoral wards (electoral divisions in Wales and the Isle of Wight) are the base unit of UK administrative geography, being the areas from which local authority councillors are elected. Commonly referred to just as 'wards', they appear in the various administrative hierarchies as follows:

- 1998 administrative hierarchy: this uses wards as at 31/12/98.
- 2003 administrative hierarchy: this uses CAS wards – i.e. wards legally agreed by 31/12/02, but with 18 very small wards merged with other wards to protect data confidentiality.
- 2004 administrative hierarchy: this uses a best-fit of Output Areas to wards legally agreed by 31/12/03, but again with very small wards being merged with other wards to protect data confidentiality.

2004 Administrative Hierarchy



1998 Administrative Hierarchy



Environmental Data

- 3.10 Environmental data have been collected more specifically within the Porthcawl Development Area and areas directly adjacent, or at County Borough level where localised data is unavailable.
- 3.11 A summary of the key features of the baseline reported in Appendix B is provided below.
- 3.12 Detailed baseline data have been provided in Appendix B, which is organised into three datasets relating to social, environmental and economic issues, under each of which a set of resource types have been outlined. For each resource type, a quantitative appraisal of the current conditions has been provided wherever possible (in terms of the specified indicator) and supplemented where appropriate by a supporting qualitative description.
- 3.13 Where applicable, 'comparators and targets' have been identified and an analysis of trends (both historic and anticipated future) against the targets have been summarised. Where the baseline is anticipated to perform poorly or well against the targets, an analysis of the underlying causes has been undertaken and this information has been subsequently used to inform the determination of 'key issues' in the next stage of the SA process.

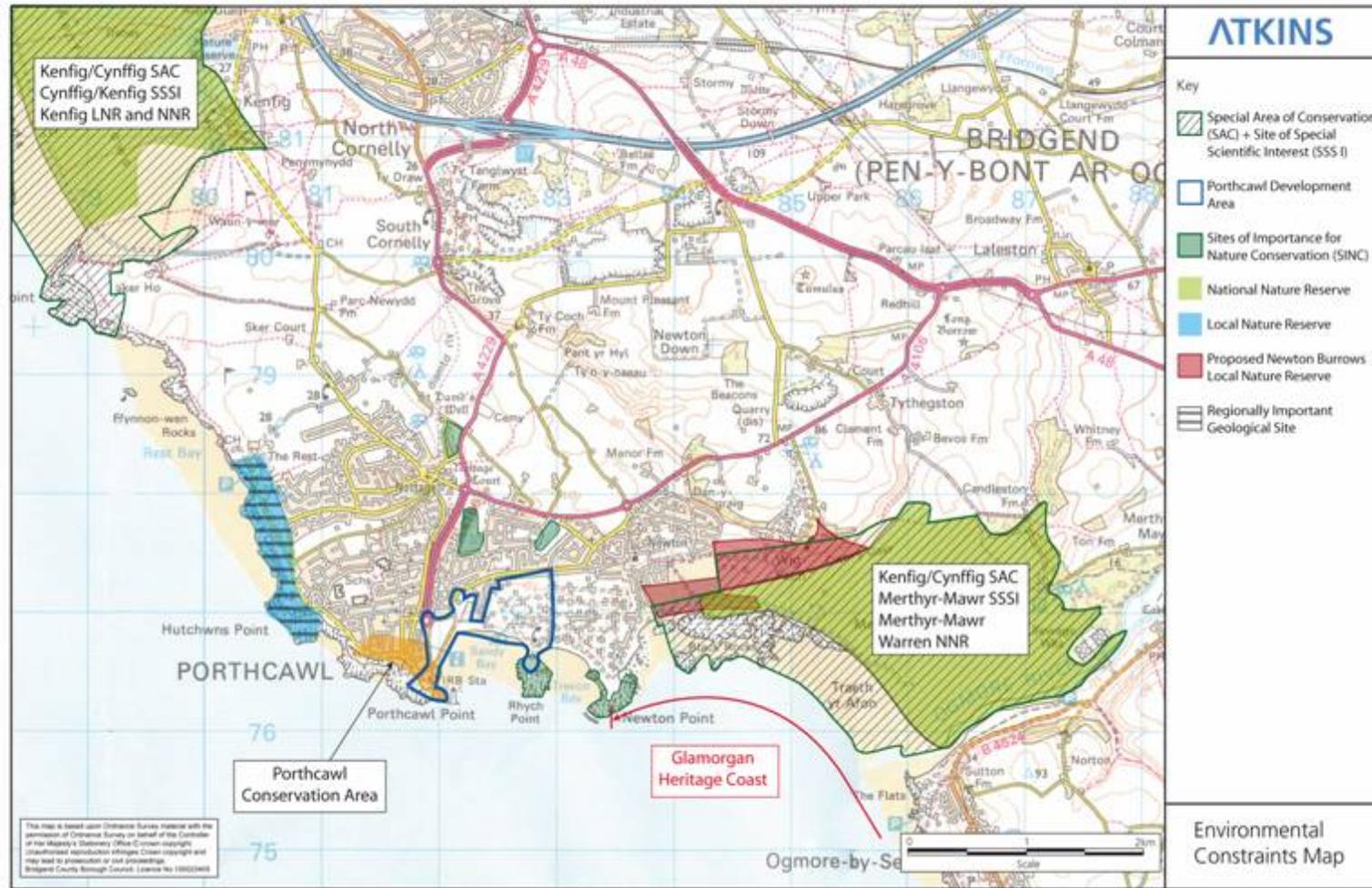
SUSTAINABILITY BASELINE – KEY FEATURES

Environmental Baseline

Biodiversity, Flora and Fauna

- 3.14 The nearest statutory designated site (less than 2 km to the east and west of the site) to the Porthcawl Development Area is the Kenfig/Cynffig Special Area of Conservation (SAC), designated under the EC Habitats Directive, which includes both the Cynffig/Kenfig Site of Special Scientific Interest (SSSI) and Merthyr Mawr SSSI. Both sites are also designated as National Nature Reserves (NNR) and Local Nature Reserves (LNR) (as shown in Figure 3.2).
- 3.15 The Kenfig/Cynffig SAC is designated for its internationally significant coastal dune systems. Annex I habitats of the EC Habitats Directive that are the primary reasons for designating the site include fixed dunes with herbaceous vegetation, dunes with *Salex repens* spp. *Argentea*, humid dune slacks and Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. Annex II species that are the primary reason for designating the site include Petalwort and Fen Orchid (Joint Nature Conservation Committee, <http://www.jncc.gov.uk>).
- 3.16 Lock's Common LNR lies to the west of the development area, adjacent to Rest Bay, whilst Newton Burrows proposed LNR lies to the east of the development area, as shown on Figure 3.2.
- 3.17 Although no statutory designated sites lie within the Porthcawl Development Area, relict dunes are located at the eastern end of Sandy Bay. Sands Dunes are identified as a Local and UK Priority Habitat (Local Biodiversity Action Plan (BAP), Bridgend County Borough Council). Generally within Bridgend County Borough, Coastal Sand Dunes are threatened by loss from development, disturbed tidal patterns, ill-considered dune stabilisation and sea defence works (Local BAP, 2002).
- 3.18 The relict dunes at the eastern end of Sandy Bay have already been degraded to a certain extent by use as part of the caravan park through a series of seasonal temporary permissions for siting of caravans within them.

Figure 3.2 - Environmental Constraints for the Porthcawl Area



- 3.19 Over 160 non-statutory Sites of Importance for Nature (SINCs) are designated within the County Borough. Several lie close to the Porthcawl Development Area, as shown on Figure 3.2.

Geology and Geomorphology

- 3.20 Lock's Common LNR is also designated as a Regionally Important Geological Site (RIGS). The limestone pavement feature is found scattered across approximately 1 hectare of the site, with a prominent cliff on the inland side of the common and additional outcrops formed naturally or where footpath erosion along the cliff top has occurred (Bridgend County Borough Council, 2003).
- 3.21 The sand dune systems of the Kenfig/Cynffig SAC are internationally important and contain a largely intact dune system with extensive areas of fixed dune vegetation, dune slacks, humid dune slacks and Kenfig Pool, a shallow lake system within the dunes system. These dune systems provide a geological base for characteristic ecology and biodiversity.

Air Quality

- 3.22 There is no Air Quality Management Areas (AQMA) within the Porthcawl Development Area or Bridgend County Borough. Porthcawl was excluded from detailed investigations as part of the Council's initial Review and Assessment of air quality due to low concentrations of air pollutants.
- 3.23 Neighbouring Counties of Swansea and Port Talbot do have AQMAs in place and Bridgend is at risk of poor air quality particularly as the M4 crosses the County Borough; however this is located a significant distance from the Porthcawl Development Area.

Coastal Water Quality

- 3.24 The Outer Bristol Channel North, which represents the coastal area of the Porthcawl Development Area, is classified as 'at risk' by the Environment Agency under the Water Framework Directive. Coastal waters are particularly at risk from physical or morphological alteration and alien species (Environment Agency, <http://www.environment-agency.gov.uk>).
- 3.25 However, in 2006, the waters around the Porthcawl Development Area at Sandy Bay, Trecco Bay and Rest Bay were compliant with the EU Bathing Water Directive and received a rating of 'excellent'. Rest Bay, although outside of the Porthcawl Development Area, has achieved Blue Flag status and is popular with surfers. Trecco Bay has also achieved Blue Flag status. Sandy Bay is also a popular surfing venue but does not enjoy the same status as Rest and Trecco Bays.

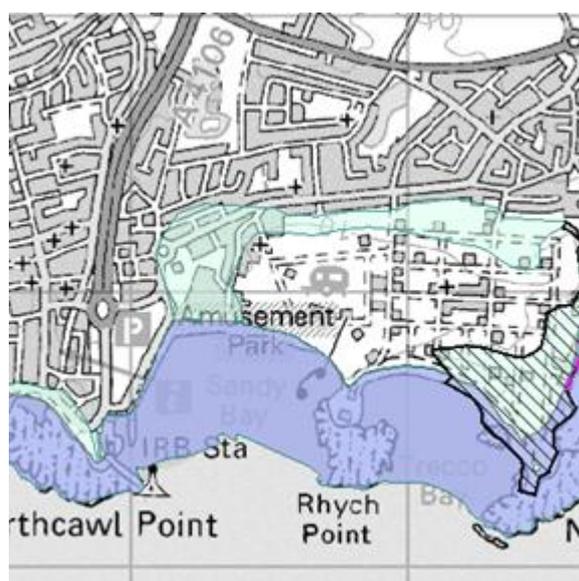
Groundwater Quality

- 3.26 Groundwater aquifers underlying the Porthcawl Development Area have recently been classified as 'not at risk' by the Environment Agency under the Water Framework Directive (Environment Agency, <http://www.environment-agency.gov.uk>).

Flood Risk

- 3.27 As shown in Figure 3.3 a significant part of the Porthcawl Development Area foreshore is at risk from tidal flooding during a flood event (1 in 200 year return period). Flood defences currently provide protection to the eastern portion of the Development Area along the west of Newton Bay (Environment Agency, <http://www.environment-agency.gov.uk>).
- 3.28 There appears to be two potential sources of tidal flooding to the proposed development area (Halcrow Group Limited, 2005).
- 3.29 The first potential source of tidal flooding is as a result of overtopping of the existing defences in the western part of Sandy Bay. The second potential source of tidal flooding is from Newton Bay, to the east of the Porthcawl Development Area. However further work; including more detailed surveys, confirmed there is no viable flood path between Newton Bay and the Porthcawl Development Area (Halcrow Group Limited, 2005).

Figure 3.3 - Environment Agency Flood Risk Map for Porthcawl



Key: Mid blue shaded area is at risk from flooding during a 1 in 200 year event (with no flood defences).
 Light green is the area at extreme flood risk during a 1 in 1000 year event (with no flood defences).
 The hatched area is currently protected by flood defences.

Source: Environment Agency <http://www.environment-agency.gov.uk>

Coastal Defences

- 3.30 The Shoreline Management Plan (SMP) (sub-cell 8b: Worm's Head to Lavernock Point) identifies that the stretch of coast adjacent to the Porthcawl Development Area is being eroded, and that this is causing risk to the breakwater structure at high tides and during storms. The SMP also identifies that most of the defences in the area are not adequate.

Contaminated Land

3.31 The Porthcawl Development Area has a history of potentially contaminating land uses that may have introduced soil contamination to the area. These include the following uses (alongside present uses):

- ◆ Onsite
- ◆ Holiday village / camp site;
- ◆ Garage services;
- ◆ Railway land and sidings;
- ◆ Coal yards;
- ◆ Infilled Harbour;
- ◆ Docks;
- ◆ Car parking;
- ◆ Ship building yard;
- ◆ Electrical substation; and
- ◆ Various 'tanks'.
- ◆ Offsite
- ◆ Gasworks;
- ◆ Waterworks;
- ◆ Sewage works;
- ◆ Garage services;
- ◆ Bus depot;
- ◆ Depots (undefined uses);
- ◆ Builders' yard;
- ◆ Railway land and sidings;
- ◆ Harbour services; and
- ◆ Various 'tanks'.

3.32 The previous uses of the site and its immediate environs give a potential for significant contamination of the site and sensitive receptors (surface water and groundwater) (Jubb Consulting Engineers, 2006). The following potential contamination sources have been assessed from the previous uses of the site and its immediate environs:

- ◆ Possible imported fills and demolition spoil;
- ◆ Asbestos products (e.g. infilled ground);
- ◆ Solvents;
- ◆ Hydrocarbons and tar;
- ◆ Other organics;
- ◆ Inorganics;
- ◆ Heavy metals;

- ◆ Acids / alkalis;
- ◆ Possible herbicides;
- ◆ Organotins (e.g. in harbour areas, fills);
- ◆ Elevated organic carbon (fills);
- ◆ PCBs (e.g. near substations, railway lines);
- ◆ Localised fly tipping; and
- ◆ Landfill gases.
- ◆ Potential human health and environmental receptors have been identified as:
 - ◆ Future occupants;
 - ◆ Ground workers;
 - ◆ Current occupants and site workers;
 - ◆ Groundwater / underlying aquifer;
 - ◆ Surface water;
 - ◆ Low lying at potential flood risk (e.g. residential areas to the north and north west of the Development Area);
 - ◆ Aquatic life;
 - ◆ Proposed buildings;
 - ◆ Waste tips offsite;
 - ◆ Proposed landscaping; and
 - ◆ Offsite sensitive land / sea uses.

3.33 The extent of contamination will need to be established by intrusive investigation, and its significance identified and quantitatively risk assessed. However, it is considered that the former caravan park (now abandoned) will be generally at low risk (except locally at the former on-site garage location off Rhych Avenue and the two substation sites), the amusement park land due south of the former gasworks at high risk, the infilled harbour basin (now car park) medium to high risk, and other car park areas and former railway land low to medium risk (Jubb Consulting Engineers, 2006).

Cultural Heritage

3.34 The eastern part of the Porthcawl Conservation Area lies within the Porthcawl Development Area as shown in Figure 3.2. Five listed structures are located within the Porthcawl Conservation Area and include:

- ◆ Western breakwater including lighthouse;
- ◆ The Old Customs House;
- ◆ Outer Harbour;
- ◆ Jennings Warehouse; and
- ◆ Look Out Tower, Promenade.

Landscape

- 3.35 Although no designated landscapes lie within the Porthcawl Development Area, the Glamorgan Heritage Coast (Policy EV9 of the Adopted UDP) lies to the east of the site from Newton Point East (see Figure 3.2). The landscape associated with the Glamorgan Heritage Coast is important within the national context and covers one of the finest stretches of undeveloped coast in England and Wales. As such it occupies the highest tier of landscapes of importance in the County Borough.
- 3.36 The SAC and SSSI designations of Merthyr Mawr, Kenfig and Margam Burrows are also an integral part of the historic landscape of the area and are included on the Register of Landscapes of Outstanding Historic Interest in Wales.

Waste

- 3.37 There are no data for the Porthcawl Development Area itself. In 2000/2001, the total waste arisings in Bridgend was 356,672 tonnes (not including agricultural waste which raises the total to 416,634 tonnes). The majority of waste was from construction and demolition, with a large amount from commercial and industry (not including special wastes) and only around 18% municipal waste. However over 90% of construction and demolition wastes are recycled, and some waste is exported. In Bridgend data shows that 116,696 tonnes went to landfill in 2000/2001, and 1,287,198 tonnes in the South West region in total.
- 3.38 Performance figures show that Bridgend County Borough is one of the best areas in Wales for recycling. The percentage of recycled waste rose from 12% to 18% from 2004/05 to 2005/06. Waste sent to landfill decreased from 68% to 53% over the same period of time.

Social Issues

Population

- 3.39 The population of Porthcawl is approximately 15,500, which rises through tourists and visitors to approximately 48,000 during the peak summer season. In the context of the County Borough, the population is projected to grow by 4.8% between 2001 and 2016, which would equate to a population size of approximately 16,200 by 2016. This is broadly comparable to projections for population growth across Wales as a whole.

Age Structure

- 3.40 Porthcawl, however, has a relatively ageing population in comparison to national averages, particularly notable for persons over 65 (25.9% and 21.2% for Porthcawl West and East respectively, compared to 17.3% for Wales). In addition, the proportion of population under the age of 16 is lower than the national average.
- 3.41 Assuming a continuation of these trends, the age structure is moving towards unsustainable levels, both demographically and economically, with a smaller proportion of workers being required to support a higher proportion of elderly dependents. This trend also places additional pressure on services and decreases demand for school places, particularly in the primary sector.

Deprivation

- 3.42 The Index of Multiple Deprivation (IMD) provides a composite rank of deprivation at the local level, providing a comparative ranking of all of the statistical areas of Wales across a range of 'domains' encompassing income; employment; health; education; access to services; housing; and physical environment. For the Porthcawl area, four of the administrative areas used for the 2005 IMD are of relevance – Porthcawl East Central 1 and 2 and Porthcawl West Central 1 and 2.
- 3.43 In general terms, overall levels of deprivation in Porthcawl are relatively high, with all of the statistical areas, except the Porthcawl West Central 2 area, falling within the top third of the most deprived areas in Wales. However, in analysing the constituent domains of the index, there is notable variation both geographically and by subject. This suggests that there are pockets of more deprived households/community sectors within the statistical areas themselves, pointing towards a local population that is somewhat varied and thus complex in its socio-economic performance and levels of engagement.
- 3.44 In geographic terms, there is a tendency for the eastern part of the town to exhibit higher levels of deprivation across the domains, although the East Central 1 area performs particularly well against the physical environment domain and has a reasonably good rank in terms of accessibility to services.
- 3.45 The physical environment domain is highly ranked for all of the areas, reflecting the coastal location and high quality natural environment that surrounds the town. The areas are also relatively less deprived in terms of Access to Services and Education, with Porthcawl West Central 1 and 2 falling in the top third of the least deprived areas in Wales in terms of Education.
- 3.46 The East Central areas (1 and 2) both appear to have significant levels of relative deprivation in terms of housing, health and employment and, to a lesser extent, the Porthcawl West Central 1 performs poorly in these areas.

Health

- 3.47 Life expectancies for both males and females across the County Borough are below national averages. Males have an average life expectancy of 74.8 and females, 79.1 – this compares to 75.7 for males and 80.2 for females nationally (2001 - 2003).
- 3.48 The proportion of people with limiting long term illness is above the national average – 29.5% in central Porthcawl compared to 23% in Wales. In addition, people who self-assessed their general health as 'not good' represented a higher proportion of the population of central Porthcawl than the national averages – 16.5% compared to 12%, respectively.

Open Space

- 3.49 Three areas of open space lie within the Porthcawl Development Area. Cosy Corner Park lies between the harbour and seafront car park and is characterised by areas of concrete and grass with brightly coloured timber seats. Griffin Park is a well-maintained park of a formal character with traditional bedding displays, a series of bowling greens, tennis courts and a well-used children's play area. A woodland park

also lies within the Porthcawl Development Area that contains several trees with Tree Protection Orders (TPOs). The wooded character of the park is invaluable in an otherwise exposed coastal setting.

Housing

- 3.50 The total number of households in Porthcawl central is 3039. Average household sizes are below national and regional averages – in Porthcawl East and West they are 2.21 and 2.15, respectively, compared to 2.37 in Wales and 2.38 in Bridgend County Borough as a whole. This is likely to be linked to the popularity of Porthcawl as a retirement destination, exemplified by the age structure statistics, as discussed previously. In terms of trends, it should also be noted that national statistics point to a general decrease in household sizes as an increased number of people live alone or in smaller families.
- 3.51 According to the 2001 census, a significant proportion (and indeed, above national average) of properties in Porthcawl were owned outright. However, there were also a significant incidences of private rental – 11% and 15% in the East and West Central wards, respectively, compared to just 7% nationally. This may, in part at least, be due to difficulties in housing affordability both for first time buyers and retired persons – the HM Land Registry statistics included in the 2006 Housing Needs Assessment enable an income to house price ratio for Porthcawl to be calculated at approximately 6.9, which is considerably above the level normally offered by mortgage lenders.

Crime and Fear of Crime

- 3.52 In general terms, Porthcawl has relatively low levels of crime, totalling 231 crimes in (Porthcawl East and West beats) in 2004/2005, falling to 208 crimes in 2005/06. Within this total, the significant majority of recorded crimes relate to violence and, whilst the majority of crime types appear to be falling in the town, this particular type of criminal activity is increasing overall, with a greater recorded incidence in Porthcawl East than Porthcawl West.
- 3.53 In respect of other types of crime, incidences of robbery, arson and Burglary from dwellings have barely reached double figures between 2001 and 2006; however, motor vehicle theft statistics appear to be higher and fluctuating. Historically, this has been more of an issue for Porthcawl East, although the latest statistics record 20 and 19 incidences, the East and West beats respectively.

Transportation

- 3.54 Porthcawl does not have direct rail access – the nearest station is at Pyle, although this only provides local services; for intercity connections, Bridgend is the closest station and there is a shuttle bus service connecting it with Porthcawl town centre. Primary public transportation is therefore by bus – three operators provide a reasonable level of daytime service to the town, as illustrated in Table 3.2; however, evening connections are relatively infrequent.

Table 3.2 - Public Transport Accessibility

No.	Operator FC – First Cymru Buses Ltd. SR – Stagecoach Rhondda TF – TravelFinal Ltd.	<u>Route</u>	Days of Operation	Frequency P – Peak 08:00 – 18:00 OP – Off Peak
X2	FC	Porthcawl – Bridgend - Cardiff	Monday to Saturday	P – Every 20 minutes OP – Hourly
X2	FC	Porthcawl – Bridgend - Cardiff	Sunday	Hourly
61	FC	Porthcawl – West Park Drive - Porthcawl	Monday to Saturday	10:00 – 17:00 Every 30 minutes
62	FC	Porthcawl – Bridgend - Pencoed	Monday to Saturday	09:00 – 17:00 Hourly
63	FC	Porthcawl – Bridgend via Pyle, The Pines, POW Hospital	Monday to Saturday	P – Every 20 minutes OP – Hourly
63	FC	Porthcawl – Bridgend via Mawdlam, Pyle, The Pines, POW Hospital	Sunday	09:00 – 22:00 Hourly
172	SR	Porthcawl – Bridgend - Aberdare	Monday to Saturday	08:00 – 18:00 Hourly
224	FC	Porthcawl - Port Talbot - Swansea	Monday to Saturday	07:25 – 17:45 Hourly
801	TF	Porthcawl to Danygraig Avenue	Monday to Saturday	09:00 – 16:00 Hourly
803	TF	Porthcawl to Rest Bay	Monday to Saturday	09:00 – 16:00 Every 90 minutes

Source: Retailing and Commercial Centres in Bridgend County Borough 2005 (BCBC)

Economic Issues

Economic Drivers

- 3.55 The main drivers for economic growth are Porthcawl's environmental assets – areas of high scenic beauty and biodiversity coupled with the coastal location offering accessible, sandy beaches and excellent waves for active pursuits. In addition to serving as a key attractor in terms of in-migration, these assets are the main drivers for the local tourist economy, placing Porthcawl as the top destination within the County Borough.
- 3.56 In 2004, the tourist economy accounted for 1,105 full time equivalent jobs in Porthcawl, with the resort attracting an estimated 912,000 visitors throughout the year. The total spend of these visitors in the local economy was calculated to be in the order of £59.2 million, of which £12.2 million was spent on accommodation alone.
- 3.57 In terms of other employment sectors, statistics indicate a tendency towards employment within the skilled sectors (professional, associate professional and skilled trades) as representing a higher proportion of employment than the regional and national averages. This is reflected in average wage levels for earning households, which are above regional averages: in 2004 the average household income for Porthcawl was £30,536, compared to the Bridgend average household income which was £28,812.

Employment

- 3.58 Bridgend has been identified as one of the ten fastest growing local authorities in the UK in terms of job creation. Of particular note is the fact that in 1995 manufacturing employee jobs stood at 29.7% of total employment, whereas in the latest NOMIS Labour Profile 2001, it stood at 21.2% representing a significant downward trend. Since 2004 there has been a continuing and dramatic contraction of manufacturing jobs. On the other hand, service employee jobs in Bridgend stood at 65% in 1995 compared with 73.4% in the latest NOMIS Labour Profile.
- 3.59 In 2005, Bridgend County Borough had an unemployment rate of 4.9%. This is similar to the unemployment rates for Wales (5%) and Great Britain (4.9%), although these statistics relate to the 2003/04 period. The 2006 Claimant Count method indicates that the unemployment rate for Porthcawl East (2.4%) and Porthcawl West (1.7%), compared similarly to Bridgend (2.4%) and Great Britain (2.5%).

Town Centre Vitality

- 3.60 Retailing in Porthcawl is concentrated along John Street. All of the major high street banks and building societies are represented in the town; however, Porthcawl lacks major retail companies and, according to the latest available health check, suffers from spending leakage to nearby competitors such as McArthur Glen. This is reflected in retail rental levels that, although having risen from £27-28/sq. ft in 2003 to £30-31/sq ft in 2005, remain relatively weak. Furthermore, the town's outlets are dominated by the service sector, which occupied almost 34% of all units surveyed in the 2005 health check.
- 3.61 A public attitude survey in 2004 included the conclusion that 50% of patrons surveyed considered the choice of food outlets in Porthcawl to be either poor or very poor. In part, this is due to the configuration of outlets within the town centre – only 2 units are greater than 15000 sq ft in size, with the majority of the town centre premises (52%) being less than 1000 sq. ft. The breakdown of units by size indicates that the town is successful in attracting small businesses to the core, but that it cannot currently cater for demand for larger stores. In addition, the current trend in vacancy has risen from 4.5% of all units in 2002 to 8.07% of units in 2005 – although in part this is due to an amendment in the town centre boundary (to include additional streets) there has been a net increase in vacancy within the original 2004 boundary.

Education, Skills and Qualifications

- 3.62 Data relating to education, skills and qualifications in the Porthcawl area indicates a considerable spatial disparity between the East and West of the town. In the eastern part of the town, 40% of the population has no qualifications compared to 33% across Wales and just 29% in the western part of the town. Similarly, the proportion of the population holding the higher level 3 and 4 qualifications is 6 and 12% in the east of the town, respectively, which compares to 7% level 3 and 23% level 4 in the west of the town; and 7% (level 3) and 17% (level 4) nationally.
- 3.63 In terms of education deprivation, the IMD for 2000 ranks the eastern ward at 520 and the western at 800 (out of 865). By the 2005 IMD, the eastern ward was ranked

778 out of 1896 and the western, 1301 out of 1896. Again, this reinforces the considerable educational disparity between the two parts of the town.

Economic Enterprise

- 3.64 The key indicator used to assess economic enterprise is total VAT registrations - during 2005 in Bridgend new registrations totalled 275 (+9.9%) per annum (pa) compared to +7.9% pa for Wales and +9.7% pa for GB. In contrast there were 210 deregistrations (-7.5%) pa in Bridgend in comparison with -6.8% pa for Wales and -8.3% pa for GB. These figures indicate that Bridgend is performing comparatively well and has a relatively strong economy.
- 3.65 In considering Porthcawl specifically, VAT registration and deregistration statistics are not available; however, of the total stock of VAT registrations in 2005 (2785), 545 businesses were in Porthcawl, representing approximately 20% of the County Borough's total. In cross-referencing these statistics to the breakdown of businesses in the core of the town it is apparent that there has been little alteration in the number of outlets since 2002 (and potentially before then), suggesting that overall levels of business activity have remained relatively stable as opposed to experiencing significant increases or decreases.

CUMULATIVE EFFECTS

- 3.66 Cumulative effects can occur from the following situations:
- ◆ Combined effects of a plan with effects of another plan, affecting the same receptor. For example, proposals from land use and transport plans could affect a nature reserve;
 - ◆ Interaction of policies within a plan in the same receptor. For example, a policy to encourage development which promote jobs and a housing policy to provide more housing to meet the borough's target could result in a cumulative loss of open space;
 - ◆ Interaction of effects from proposals within a plan affecting the same receptor. For example, proposals to build roads, commercial premises and housing in a particular area within a short period of time could result in cumulative noise, dust and visual effects on the residents nearby.
- 3.67 As part of the scoping process, likely cumulative effects of the Porthcawl Waterfront SPG were identified from the analysis of plans and programmes and the environmental baseline. This analysis has identified a preliminary set of likely cumulative effects, their receptors and likely causes, as shown in Table 3.3. This initial assessment of likely cumulative effects will be further examined in more detailed environmental assessments as part of the SA process.

Table 3.3 - Potential Cumulative Effects and their Causes

Cumulative Effect	Affected Receptor	Causes
1. Habitat loss and fragmentation	- Areas of local conservation significance - Sites of non-designated significance for nature conservation including wildlife corridors	Use of land for new infrastructure, dwellings and employment uses.
2. Climate change	- Worldwide	Increase in CO ₂ emissions through increased motorised transport usage and increased emissions from residential and commercial developments
3. Increase in ambient noise levels	- People living adjacent to major roads within Porthcawl - Wildlife and Species	Increase in traffic flows, increased congestion, new transport infrastructure
4. Increase in air pollution	- People living and working in near main roads - Wildlife habitats and species described in 1 above.	Increase in traffic flows, increased congestion, new transport infrastructure
5. Loss of local townscape character	- Porthcawl Conservation Area	Unsympathetic design of new development negatively affecting the setting of the Conservation Area. Disturbance to character of areas through increased traffic flows.
6. Improvement in overall levels of health	- Porthcawl residents	Increase in walking and cycling from infrastructure improvements. Improvements in levels of air quality.
7. Increase in accessibility to essential services	- Porthcawl residents	Improved provision of public transport, walking and cycling, and car linkages to essential services. Direct provision of new community facilities.
8. Reducing road traffic and congestion	- Porthcawl residents - Wildlife habitats and species described in 1 above.	Various measures and proposals aimed at reducing road traffic and congestion and encouraging alternatives to the car.
12. Attracting inwards investment and increasing economic diversity	- Porthcawl residents - Wider Bridgend residents	Various proposals aimed at improving the image of the area to residents and businesses, which may attract additional private sector investment in the area.

KEY SUSTAINABILITY ISSUES

- 3.68 The next task in the SA is the identification of sustainability issues. This provides an opportunity to define key issues for the SPG and to improve the SPG vision and options. The analysis of sustainability issues influences the development of the baseline and the SA framework, in particular in identifying and selecting indicators and targets.
- 3.69 The requirement to identify sustainability problems and issues arises from the SEA Directive, where the Environmental Report required under the Directive should include:
- 3.70 *“any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC(Birds) and 92/43/EEC(Habitats)”(Annex I (d))*
- 3.71 Table 3.4 below presents the results of the analysis of key sustainability issues.

Table 3.4 - Key Sustainability Issues

Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
SOCIAL			
<p>Housing Mix and Choice</p> <p>Current housing stock exhibits differing patterns from Wales as a whole with a significantly higher proportion of households living in semi-detached dwellings (47% in East Porthcawl compared to 32% in Wales) or flats (14% and 16% in Porthcawl east and west wards, respectively, compared to 8% across Wales) than the Welsh averages. Correspondingly, there are a considerably lower proportion of households living in detached accommodation (9% and 17% in east and west Porthcawl, respectively, compared to 27% across Wales).</p> <p>In terms of housing tenure, a higher proportion of households in Porthcawl own their homes outright than across Wales as a whole – this is considered to be related to the fact that a higher proportion of the population falls within older age brackets, more likely to have paid off their mortgages. However, there is a considerable proportion of homes rented from private landlords – 11% in East Porthcawl and 15% in West Porthcawl compared to just 7% across Wales as a whole.</p>	<p>There will be a need for the Porthcawl Waterfront SPG to ensure that the housing mix and type complements the existing housing stock, providing a harmonious transitional relationship with the traditional terraces and semi-detached properties in the vicinity of the site. Housing type should also seek to fulfil local demand, which includes a higher proportion of flatted developments than Wales as a whole.</p> <p>Housing mix and choice will need to be carefully linked to both existing and potential changes to the demographic structure of the town and its environs. In order to encourage a move from private rental to purchase, there will be a need to ensure that the choice of units is affordable and appealing in the context of local market conditions.</p>	Population	2
<p>Population Demographics</p> <p>Porthcawl is traditionally cited as a popular destination for retirement. The population demographics reflect this to a certain extent, with a greater proportion falling into the older age brackets and, more notably, a considerably lower proportion of the population aged under 16 than the Welsh average. This presents some risks in terms of economic</p>	<p>Population demographics are a key influencing factor for a wide range of different development types – housing, education provision, open space and recreational opportunities, healthcare and community services. The Porthcawl Waterfront SPG will need to take local</p>	Population Human Health	2, 4, 5, 6

Sustainability Appraisal Report

Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
<p>stability, with a relatively lower proportion of the population being of working age (an average of 69% compared to the Welsh average of 71%) and child bearing age, with the local economy/healthcare/social services being required to support a relatively higher proportion of elderly (and usually more dependent) persons.</p> <p>Decreasing numbers of children (aged under 16) has also contributed to an increase in surplus spaces in primary schools with three of the four local primaries having a combined total of 42 surplus spaces (38 of these are centred on one school) and the trend suggests that this will increase. This also has implications for the type of community recreation and leisure provision that is appropriate to the locale.</p>	<p>demographics into consideration and offer an opportunity to seek the delivery of a more balanced and self-sufficient community. Housing choice will need to reflect the needs of and seek to attract people of households of different ages, sizes and life stages; community provision (healthcare/ community centres etc.) will need to accommodate the requirements of all ages; and open space provision will need to include both formal provision for play space, as well as more informal provision better suited to older age groups.</p> <p>In terms of supporting educational provision and seeking a more balanced long term demographic for Porthcawl, there may be benefit in parts of the residential elements of the scheme seeking to appeal to couples of childbearing age through design.</p>		
<p>Health and Well-Being (potential cumulative effect)</p> <p>In general terms, health statistics suggest that both actual and perceived levels of health in Porthcawl are lower than the national average. There is a considerably higher proportion of the population with limiting long term illnesses than Wales (an average of 29.5% compared to 23% for Wales); the number of households with one of more persons with limiting long term illness is also higher than the national average (30% and 29% in Porthcawl East and West, respectively, compared to 23% in Wales); life expectancy in Bridgend County Borough is lower than that for Wales; and the proportion of persons considering their health as not good is noticeably higher than in Wales as a</p>	<p>To a certain extent, the health statistics may be linked to the fact that Porthcawl tends towards a more elderly population. However, the Porthcawl Waterfront SPG may also offer an opportunity to help contribute to improved health through providing space and facilities for increased recreational and sporting pursuits; adopting an approach to design that seeks to safeguard air and water quality; and encouraging increased levels of walking and cycling via the provision of a permeable and</p>	<p>Population Human Health</p>	<p>4</p>

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Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
whole (18% and 15% in Porthcawl East and West respectively, compared to 12% across Wales).	legible route way system through the site.		
<p>Crime and Perception of Crime</p> <p>In general terms, crime levels in Porthcawl are relatively low. However, the population of the town increases threefold in the peak summer tourist season, which is associated with increased incidences of criminal activity. In addition to this, fear of crime can be a factor that limits the ability and inclination of certain members of the community, tending to be the elderly and the very young, from fully participating in activities, especially after dark.</p>	<p>There will be a need for the Porthcawl Waterfront SPG to minimise opportunities for increased levels of criminal activity to accompany the proposed increase in population arising from the planned residential development. This will primarily relate to design measures such as the mixing of house types and sizes, the location of public and private open space and the network of route ways, particularly for non-motorised users. In addition, careful consideration will need to be given to the siting of any commercial activities and security of vulnerable land-uses such as the proposed marina.</p>	<p>Population Human Health Landscape</p>	3
<p>Accessibility (potential cumulative effect)</p> <p>Porthcawl is served by a range of bus services, however, there are considerable issues surrounding the integration of different modes of transport (i.e. bus and rail), which tend to make the private car a more appealing choice for longer distance journeys.</p> <p>In terms of travel mode, however, travel to work statistics suggest that there is a higher proportion of the population choosing to walk to work than the national average (15.6% and 18.4% for Porthcawl East and West, respectively, compared to 10.3% for Wales as a whole). This suggests that local</p>	<p>Given the planned increase in the residential population likely to arise from the development, the Porthcawl Waterfront SPG will need to ensure that street layouts and route ways are well planned to reflect desire lines and convenience – this will help to foster a more sustainable transport pattern both for local and longer distance commuting journeys, with attendant health and environmental benefits. By incorporating improved transportation links with neighbouring settlements, the development</p>	<p>Human Health, Climatic Factors, Air</p>	1, 4

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Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
connections for walking and cycling are relatively attractive to the resident population.	proposals also offer the opportunity to maximise potential benefits from visitors.		
ENVIRONMENTAL			
<p>Designated Sites (potential cumulative effect)</p> <p>Although no Designated Sites are located within the Porthcawl Development Area, two sites that make up the Kenfig Burrows Special Area of Conservation (SAC) are located close to the Development Area. These areas include the Kenfig Pools and Dunes SSSI and Merthyr Mawr Warren SSSI. These sites are also designated as National Nature Reserve (NNR) and Local Nature Reserve (LNR).</p> <p>Effects on these could be cumulative</p>	Need for the Porthcawl Waterfront SPG to ensure that development within the Porthcawl Development Area does not adversely affect these designated sites. Appropriate Assessment has been undertaken on the Porthcawl Waterfront SPG.	Biodiversity, Flora and Fauna	10
<p>Relict Dunes within Development Area (potential cumulative effect)</p> <p>Relict dunes are located at the western end of Sandy Bay within the Porthcawl Development Area. Coastal Sands Dunes are identified as a Local and UK Priority Habitat (Local BAP, 2002).</p>	Generally within Bridgend County Borough, Coastal Sand Dunes are at threat from loss from development, disturbed tidal patterns, ill-considered dune stabilisation and sea defence works (Local BAP, 2002). There is an opportunity for the Porthcawl Waterfront SPG to further detail dune protection measures proposed in the Porthcawl Development Framework SPG.	Biodiversity, Flora and Fauna	10, 18

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Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
<p>Woodland Park</p> <p>A woodland park lies within the Porthcawl Development Area and contains several trees with Tree Protection Orders. The wooded character of this park is invaluable for providing shelter and enclosure in an otherwise exposed setting.</p> <p>Removal of important trees could have a cumulative effect.</p>	<p>Opportunity for the Porthcawl Waterfront SPG to conserve and enhance the wooded character of the park and ensure trees are protected during construction.</p>	<p>Biodiversity, Flora and Fauna, Landscape</p>	<p>10, 18</p>
<p>Coastal Bathing Water Quality (potential cumulative effect)</p> <p>The waters around the Porthcawl Development Area at Sandy Bay, Trecco Bay and Rest Bay were compliant with the EU Bathing Water Directive and received a rating of 'excellent'.</p>	<p>Opportunity for the Porthcawl Waterfront SPG to promote measures in new development to maintain high levels of water quality such as utilisation of Sustainable Urban Drainage (SUDS) and adequate levels of open space, as effects on water quality can be cumulative.</p>	<p>Water</p>	<p>11</p>
<p>Water Framework Directive Coastal Classifications (potential cumulative effect)</p> <p>The Outer Bristol Channel North, which represents the coastal area of the Porthcawl Development Area, is classified as 'at risk' by the Environment Agency under the Water Framework Directive. Coastal waters are particularly at risk from physical or morphological alteration and alien species (Environment Agency, http://www.environment-agency.gov.uk).</p>	<p>Opportunity for the Porthcawl Waterfront SPG to minimise risks associated with physical or morphological alteration and alien species, particularly as these can have a cumulative effect. This has implications for marina development as physical alteration of the coast is likely and there is potential for the introduction of alien species from the hulls of boats visiting the marina, although it is unlikely that a marina at Porthcawl will attract international vessels.</p>	<p>Water</p>	<p>11</p>

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Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
<p>Flood Risk (potential cumulative effect)</p> <p>A significant part of the Porthcawl Development Area foreshore is at risk from tidal flooding during a flood event (1 in 200 year return period). Flood defences currently provide protection to the eastern portion of the Development Area along the west of Newton Bay.</p> <p>Additionally, the Shoreline Management Plan (SMP) (sub-cell 8b: Worm's Head to Lavernock Point) identifies that the stretch of coast adjacent to the Porthcawl Development Area is being eroded, and that this causes risk to the breakwater structure during high tides and storms. The SMP also identifies that most of the defences in the area are not adequate.</p>	<p>The main potential source of tidal flooding is as a result of overtopping of the existing defences in the western part of Sandy Bay. The Porthcawl Waterfront SPG should ensure that no new development occurs within the identified flood plain without adequate mitigation in place and that flood defences are adequate to withstand future predicted flood events taking account the implications of climate change.</p>	<p>Water, Human Health</p>	<p>7, 11</p>
<p>Groundwater Quality (potential cumulative effect)</p> <p>Groundwater in the Porthcawl area is classified as 'Probably not at risk' according to the Water Framework Directive.</p>	<p>Opportunity for the Porthcawl Waterfront SPG to promote measures in new development to maintain and enhance groundwater quality. Site preparation and development should not create new contaminant pathways to groundwater underlying the Porthcawl Development Area.</p>	<p>Water, Human Health</p>	<p>11</p>
<p>Contaminated Land</p> <p>The Porthcawl Development Area has a history of potentially contaminating land uses that may have introduced soil contamination to the area.</p>	<p>The extent of contamination will need to be established by intrusive investigation, and its significance identified and quantitatively risk assessed. Contaminated land will have to be remediated prior to development.</p>	<p>Soil, Human Health</p>	<p>8</p>

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Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
<p>Local Historic Character (potential cumulative effect)</p> <p>The Porthcawl Conservation Area lies within the Porthcawl Development Area. Five listed buildings are located within the Porthcawl Conservation Area and include:</p> <ul style="list-style-type: none"> (i) Western breakwater including lighthouse; (ii) The Old Customs House; (iii) Outer Harbour; (iv) Jennings Warehouse; and (v) Look Out Tower, Promenade. 	<p>Opportunity for the Porthcawl Waterfront SPG to enhance the role of these buildings within the community and use them as focal points.</p>	<p>Cultural Heritage</p>	<p>14</p>
<p>Local Landscape Designations (potential cumulative effect)</p> <p>Although no designated landscapes lie within the Porthcawl Development Area, the Glamorgan Heritage Coast (Policy EV9 of the Adopted UDP) lies to the east of the site from Newton Point East.</p>	<p>Policy EV9 of the Adopted UDP states that 'Development which would not adversely affect, or would be visually intrusive upon, the Natural Beauty of the Glamorgan Heritage Coast will not be permitted'.</p>	<p>Landscape</p>	<p>18</p>
<p>ECONOMIC</p>			
<p>Entrepreneurship</p> <p>In general terms, new business opportunities in Porthcawl have been relatively low in number in recent years and although a few small scale businesses have emerged, particularly in association with the tourist business, there are few that have made a significant contribution to the local economy in terms of year round employment opportunities.</p>	<p>The Porthcawl Waterfront SPG presents the opportunity to support increased entrepreneurial spirit through the incorporation of a range of commercial premises within the development proposals. This could include large scale retailing opportunities to meet the convenience goods needs of a much expanded residential</p>	<p>Population Landscape</p>	<p>20</p>

Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
	<p>population, as well as the development of smaller units for business ventures such as niche retail, cafés and bars to maximise benefit from the waterfront location of the site both for the community and visitors. This could have a cumulative effect on attracting further investment to the area.</p>		
<p>Tourism (potential cumulative effect)</p> <p>Porthcawl is the principal tourism destination in Bridgend County Borough. In 2004 the industry was assessed as accounting for 1,105 full time equivalent jobs in the town and attracted some 912,000 visitors. The value to the local economy equated to £59.2 million, of which £12.2 million was the estimated spend on accommodation.</p> <p>In terms of the nature of the product, the Porthcawl ‘resort’ retains a significant waterfront caravan park (Trecco Bay with approaching 3,000 static caravans), amusement park and associated food outlets appealing primarily to a family market; a number of independently run hotels; a small harbour that can accommodate a limited number of travelling craft; and access to a series of sandy bays which have broad appeal (including families, surfers, kites, dog walkers and swimmers).</p> <p>In addition to the built environment, proximity of Porthcawl to a number of areas of considerable landscape and biodiversity interest, including the Glamorgan Heritage Coast and the SACs of Kenfig Burrows and Merthyr Mawr, holds appeal for certain visitors.</p>	<p>Tourism clearly plays a significant part in the local economy and will continue to influence the image of Porthcawl. There will be a need for the Porthcawl Waterfront SPG to acknowledge and respond to this market, seeking to introduce new buildings and land uses that serve to consolidate and extend both the appeal and season of the tourism market in the ‘resort’. A careful balance will need to be struck with the existing product offer and users to ensure that the redevelopment of this significant waterfront site continues to meet the needs of existing users, as well as ensuring the harmonious addition of increased numbers and new types of users, particularly in terms of competing demands for waterfront locations and water-based activities/recreation.</p> <p>There will also be a need to ensure that the redevelopment of the site does not detract from the prevailing character of the Porthcawl area, both in terms of built and surrounding natural environment.</p>	<p>Population</p> <p>Landscape</p> <p>Biodiversity, Flora and Fauna</p> <p>Climatic Factors</p>	<p>21</p>

Key Issues / Problems	Opportunities/Implications for Porthcawl Waterfront SPG	Relevance to SEA Topic	Relationship to SA Objectives in Table 3.5.
<p>Vitality and Viability (potential cumulative effect)</p> <p>An annual health check of Porthcawl town centre has been undertaken since 2002, with the latest available statistics representing the 2005 situation. Key statistics indicate that the town has representation from all major high street banks and building societies, yet the retail rental values are relatively weak, the town suffers competition, particularly for comparison shopping, from the nearby centres of Bridgend and McArthur Glen and the service sector is disproportionately dominant at 34% of all units.</p> <p>In terms of available units, the latest health check highlights a sharp rise in vacancy rates from 4.5% in 2002 to 8.07% in 2005 (this is in part due to a re-definition of the study area, but net vacancy did increase within the original study area as well). In addition, there is evidence to suggest that although the town is successful in attracting and catering for small businesses (>50% of all outlets are under 1,000 sq ft in size, with a further 37% being under 2,000 sq ft), the town does not currently have premises to attract and retain larger businesses. This is a particularly issues in relation to convenience goods provision, with a 2004 public opinion survey concluding that over 50% of those interviewed rating the choice of food shops in the town as poor or very poor.</p>	<p>The introduction of a considerable increase in the resident population of Porthcawl will bring a need for additional services and facilities, as well as presenting an opportunity for these needs to be met locally in order to boost the vitality and viability of the town centre economy and promote sustainable patterns of movement (i.e. reduced reliance on the car and increased personal accessibility by foot and cycle). There will be a need for the Porthcawl Waterfront SPG to establish a pattern of land uses and access routes that consolidate and expand the choice of existing retail and service provision and encourage a focus of activity on the town centre to the west.</p>	<p>Landscape</p> <p>Climatic Factors</p> <p>Human Health</p> <p>Air</p>	<p>22</p>

SUSTAINABILITY APPRAISAL FRAMEWORK

- 3.72 A refined SA framework has been developed using an iterative process, based on the review of relevant plans and programmes, the evolving baseline and developing analysis of key sustainability issues. This work has been informed throughout by the SA objectives developed for the LDP SA Scoping Report. This framework provided the backbone to developing the SA framework specific to the Porthcawl Waterfront SPG.
- 3.73 The refined SA framework of objectives, indicators and targets against which it is proposed to assess the SPG is set out in Table 3.5. It consists of objectives which may be expressed in the form of targets, the achievement of which should be measurable using identified indicators.
- 3.74 The 22 SA objectives have been worded so that they reflect one single desired direction of change for the theme concerned and do not overlap with other objectives. They include both externally imposed social, environmental and economic objectives and others devised specifically in relation to the context of the SPG being prepared and they are distinct from the SPG objectives. Some LDP SA objectives have been refined to take account of local circumstances and concerns feeding from the analysis of sustainability issues, (see Table 3.4 for relationship of sustainability issues to SA objectives), or adapted to be more specific to the issues facing the Porthcawl Development Area.
- 3.75 A set of indicators has been derived to capture the change likely to arise from the SPG implementation and will play a role in the assessment itself. Where available, indicators proposed for the Bridgend County Borough Council LDP SA framework have been used. However, where appropriate, locally relevant indicators have been proposed based on the review of local plans and programmes, the evolving baseline, and from developing the analysis of the key sustainability issues.
- 3.76 Where appropriate, existing data sources and indicators which are already monitored in the Borough have been used. In some cases, specific new indicators will require monitoring by relevant bodies should significant effects relating to the SA objectives concerned be identified as part of the assessment of effects during SA Stage B. Developing a good balance of appropriate and reliable indicators across the set of SA objectives will be crucial in the development of an effective but also practical monitoring programme.

Table 3.5 - SA Framework

Key to Data Availability for Indicators**Bold** = Known data for Porthcawl Development Area*Italic* = Known data for Bridgend County Borough CouncilUnderlined = Data for Porthcawl Development Area and Bridgend County Borough Council currently unknown

No	SA Objective	Potential Indicators	Target	SEA Topics
Social				
1	To ensure the development area is fully accessible and well served by sustainable modes of transport (cumulative effect)	<u>No of new residential units served by a regular bus service (10 min intervals)</u>	Increase	Population, Human Health
		<u>% increase/decrease change in accessibility of public transport</u>	Increase	
		<u>Distance of accessible footways within development area</u>	Increase	
2	To ensure that the housing mix and choice in the development area reflects the needs of the local population, including the provision of affordable housing	<i>% Affordable Housing</i>	30% for southern market area of the County Borough	Population, Human Health
		<i>% Unsuitable Housing by Tenure</i>	Zero	
		<u>% of eligible residential planning permissions where affordable housing has been negotiated</u>	100%	
		<u>Number of houses meeting Welsh Housing Quality Standard (WHQS)</u>	100%	
		<u>Number of empty properties brought forward against the WHQS target</u>	100%	
3	To promote safe environments and contribute to a reduction in the fear of	Overall crime	Reduce rates	Population
		Domestic burglary	Reduce rates	

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No	SA Objective	Potential Indicators	Target	SEA Topics
	crime	Fear of Crime	Reduce fear of crime	
4	To promote community health and well being (cumulative effect)	<u>Amount of new residential development within 30 minutes public transport time of: a GP and hospital</u>	100%	Human Health
		<u>Mortality rates by cause</u>	<p>To reduce heart disease, stroke and related illnesses amongst people under 75 by at least 40 % by 2010</p> <p>Source: UK Sustainable Development Quality of Life Indicators</p> <p>To reduce cancer amongst people under 75 by at least 20% by 2010</p> <p>Source: UK Sustainable Development Quality of Life Indicators</p> <p>To reduce suicide and undetermined injury by at least 20% by 2010</p> <p>Source: UK Sustainable Development Quality of Life Indicators</p>	
		<i>Life expectancy</i>	<p>To increase life expectancy</p> <p>Source: www.statistics.gov.uk</p>	
5	To ensure access to educational and training opportunities for all	<u>Amount of new residential development within 30 minutes public transport time of; a primary school; a secondary school</u>	100%	Population

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No	SA Objective	Potential Indicators	Target	SEA Topics
		Availability of primary school places	Match to population	
6	To enhance existing and promote the development of new high quality leisure, recreation and open space	<u>Ha. of accessible public open space per 1000 population</u>	2.4 ha per 1000 population Source: National Playing Fields Association	Population, Human Health, Landscape
		<u>Area of open space deficiency</u>	Reduce existing deficiencies	
		<u>The annual number of planning permissions implemented which make contributions towards new high quality leisure, recreation and open space</u>	100%	
Environmental				
7	To ensure that new development takes into account the effects of climate change (cumulative effect)	Properties at risk of flooding	No increase in the risk of flooding to property	Water, Climatic Factors
		<u>% of highly vulnerable development approved in flood risk areas contrary to TAN15</u>	No vulnerable development to take place in flood zone C2	
		<u>Number of developments incorporating Sustainable Urban Drainage Systems</u>	Increase	
8	To reduce contamination and safeguard soil quality and quantity	<u>No. of contaminated land sites</u>	Reduction	Soil, Human Health
		<u>% of contaminated land remediated</u>	100%	
9	To make the best use of land in Porthcawl including re-use of previously developed land and existing buildings	<u>% of new dwellings built on previously developed land</u>	100% for development area	Soil, Biodiversity, Flora and Fauna, Water
		<u>% of other new developments built on previously developed land</u>	100%	

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No	SA Objective	Potential Indicators	Target	SEA Topics
		<u>% of previously developed land used for accessible natural greenspace</u>	Increase	
		<u>% of residential sites developed at a density of 30-50 dph</u>	Target should be 100%	
		<u>Amount of derelict land</u>	Reduce the amount of derelict land	
		<u>No of empty properties</u>	Reduce by 10% per annum	
10	To protect and enhance biodiversity and geodiversity, including flora and fauna that are important on an international, national and local scale (cumulative effect)	Numbers, area and condition of international, European, national, regional and local designated sites	To halt the loss of biodiversity by 2010 – EU Sustainable Development Strategy	Biodiversity, Flora and Fauna
		Extent of priority habitats	Maintain those of local significance	
		<u>Population of wild birds</u>	Increase	
		<u>Number of new developments incorporating green / brown roofs</u>	Increase	
		<u>Number of new developments incorporating ecological enhancements</u>	Increase	
		<u>% of selected LBAP species stable or increasing</u>	Increase	
		<u>% of selected LBAP habitats stable or increasing</u>	Increase	
11	To maintain and improve the quality and quantity of ground waters and coastal and bathing waters (cumulative effect)	<u>Groundwater quality</u>	Maintain and/or improve	Water
		Bathing Water Quality	Maintain Excellent Standard	
		<u>Number of developments incorporating Sustainable Urban Drainage Systems</u>	Increase	

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No	SA Objective	Potential Indicators	Target	SEA Topics
12	To reduce all forms of air pollution in the interests of local air quality and the integrity of the atmosphere (cumulative effect)	<u>Estimated background air pollution data</u>	To be below national targets for pollutants	Air
		<u>No of exceedences of the 100 ug/m3 8 hr mean objective</u>	No more than 10 exceedences of the 100 ug/m 8 hr mean	
13	To reduce greenhouse gas emissions (cumulative effect)	<u>Emissions of greenhouse gases</u>	Cut domestic CO2 emissions by 20% below 1990 levels by 2010 Source: UK Climate Change Programme	Climatic Factors
14	To protect and enhance the quality and distinctiveness of the built and maritime environment in Porthcawl (cumulative effect)	Number of listed buildings	Maintain	Cultural Heritage
		<u>Number of listed buildings at risk</u>	Zero	
		<u>Area of accessible coastline</u>	As set out in Porthcawl Brief	
15	To maximise efficiency of water use in new development	<u>Number of new developments incorporating water meters</u>	100% Source: Environment Agency	Water
		<u>Number of new developments incorporating water efficiency measures / grey water recycling</u>	Reduce consumption by 25% compared to standard levels Source: Environment Agency	
16	To promote the use of material and products produced by sustainable methods in the construction of new development	<u>Percentage of new build homes meeting EcoHomes very good/ excellent standard</u>	Increase	Material Assets
		<u>Percentage of commercial buildings meeting BREEAM very good/ excellent standard</u>	Increase	

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No	SA Objective	Potential Indicators	Target	SEA Topics
17	To minimise the need for energy, increase energy efficiency and to increase the use of renewable energy	<u>Energy consumption per capita</u>	Decrease	Climatic Factors
		<u>Proportion of energy generated from renewable sources</u>	10% renewable energy target by 2010 Source: UK Climate Change Programme	
		<u>Percentage of new build homes meeting EcoHomes very good / excellent standard</u>	Increase	
		<u>Percentage of commercial buildings meeting BREEAM very good / excellent standard</u>	Increase	
18	To maintain and enhance the quality and character of the landscape, including its contribution to the setting and character of Porthcawl (cumulative effect)	<i>Area of relict dunes within Porthcawl contributing to the natural character of the area</i>	Maintain	Landscape
		<u>Amount of waterfront accessible to the public</u>	Increase	
		<u>Physical Modification of Coastline</u>	As per Coastline Management Plan	
19	To reduce the generation of waste and encourage re-use and recycling of waste in Porthcawl	<u>Kg of household waste collected per year</u>	No target identified	Material Assets
		<i>% of household waste recycled</i>	To recycle a minimum of 30% and recover a minimum of 70% of all Council waste to meet national targets by 2015 (Source: Corporate Plan, 2002-2005, Bridgend County Borough Council)	

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No	SA Objective	Potential Indicators	Target	SEA Topics
		<i>% of waste arisings composted</i>	To recycle a minimum of 30% and recover a minimum of 70% of all Council waste to meet national targets by 2015 (Source: Corporate Plan, 2002-2005, Bridgend County Borough Council)	
		<u>% of population served by a kerbside collection of recyclables</u>	No target identified	
Economic				
20	To ensure that opportunities are provided to encourage a vibrant local economy, supporting diversification and entrepreneurship (cumulative effect)	<u>% people employed by employment type</u>	To increase employment diversity	Population
		<u>Increase of VAT registered businesses in Porthcawl</u>	Increase	
21	To maintain, promote and reinforce the role of Porthcawl as a tourist destination and district centre (cumulative effect)	<u>Number of tourism related proposals</u>	No target identified	Population
		Input from tourism into local economy (£ per annum)	No target identified	
		Number of people employed in the tourism industry	No target identified	
22	To ensure that development contributes to the vitality and viability of Porthcawl town centre (cumulative effect)	<u>Vacant floorspace</u>	Maintain at <10%	Population
		<u>Net loss of retail floorspace</u>	Decrease	
		<u>No. of Small to Medium Enterprises</u>	Increase	

SA BASELINE DATA AND TRENDS

- 3.77 The SA framework is the key tool used in the assessment of effects. The prediction of effects, in terms of their magnitude, frequency, duration, and spatial extent, is conducted via detailed analysis of the baseline data. It is thus important to ensure that critical aspects of the baseline can be directly related to the objectives and indicators of the SA framework. Determining the significance of predicted effects is perhaps the most critical task in the SA. The picture that the baseline presents in terms of the SA framework is the starting point for this.
- 3.78 Table 3.6 presents a preliminary analysis of the fundamental characteristics of the baseline (current conditions, current and future trends, and sensitivity to change) against the draft SA objectives using a simple three-point normative scale as follows:
- ◆ Current Conditions - good/moderate/poor;
 - ◆ Current Trends – improving/stable/declining;
 - ◆ Future Trends (without plan implementation) - improving/stable/declining; and
 - ◆ Sensitivity to Change – high/medium/low.
- 3.79 Sensitivity to change in the context of SA represents the extent to which, for instance, ecological thresholds may be close to being breached or carrying capacity exceeded, such that relatively small changes might be likely to induce disproportionately large effects, which in some instances might have wide-ranging and/or unexpected consequences. An example might be the decline of a particular wildlife population below the level at which it is viable in a particular habitat.

Existing SA Conditions and Current Trends

- 3.80 The existing social, economic and environmental baseline for the Porthcawl is summarised in this section and contained in the baseline data sets in Appendix B.
- 3.81 The quality of the baseline data gives an indication of the certainty with which the other four parameters are known, and this is presented in Table 3.6 using a similar colour-coded three-point scale (high/medium/low).

Predicted Future Trends

- 3.82 The SEA Directive requires the consideration of the likely evolution of the state of the environment without the implementation of the SPG. During the lifetime of the SPG it is predicted that there will be a number of external influences and variables which could affect Porthcawl.
- 3.83 From Table 3.6 it is clear that without the implementation of the SPG, the future trends show decline with regards to a number of SA objectives, primarily relating to the future housing, flood risk, biodiversity, greenhouse gas emissions, built and maritime environment and all aspects of the economy. There are predicted to be some improvements in the area even without the SPG, such as a safer environment with less crime and fear of crime and reduced energy consumption and improved

energy efficiencies and use of renewable energy due to external forces from regional, national and international policy.

Table 3.6 - SA Baseline Data and Trends Summary

SA Objective		Local Baseline		Trends		Data quality	Commentary
		Condition	Sensitivity	Current	Future		
1	To ensure the development area is fully accessible and well served by sustainable modes of transport	?	?	?	?	Low	No data currently available on traffic growth, accessibility and road safety.
2	To ensure that the housing mix and choice in the development area, reflects the needs of the local population, including the provision of affordable housing	Moderate	Medium	Stable	Declining	Medium	Without implementation of the plan the lack of available affordable housing may worsen within Porthcawl.
3	To promote safe environments and contribute to a reduction in the fear of crime	Moderate	Medium	Improving	Improving	High	Latest crime statistics for the Porthcawl East and West beats indicate that in general terms crime levels are low and incidences of crime are decreasing in number. However, there is a notable trend towards increasing representation of violence within the statistics, both in the east and west of the town (albeit higher in the east). This trend may continue without intervention and environmental design can be a key factor.
4	To promote community health and well being	Poor	Medium	Stable	Stable	Medium	Although no data on levels of health within Porthcawl is currently available, the population's perception of health indicates higher than average incidences of poor health, as do statistics relating to numbers of persons with limiting long term illness. Levels of health within Bridgend County Borough are lower than national averages and are likely to remain so without implementation of the plan.
5	To ensure access to educational and training opportunities for all	Moderate	Medium	Stable	Stable	Medium	The Secondary School and most Primary Schools within Porthcawl currently have surplus places, however West Park Primary School has an excess number of pupils over the capacity of the school. This is likely to continue into the future without implementation of the plan.

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SA Objective		Local Baseline		Trends		Data quality	Commentary
		Condition	Sensitivity	Current	Future		
6	To enhance existing and promote the development of new high quality leisure, recreation and open space	Poor	Medium	Stable	Stable	Medium	Although areas of good quality open space lie within the Porthcawl Development Area, access to quality leisure and recreation facilities is poor and likely to continue into the future without implementation of the plan.
7	To ensure that new development takes into account the effects of climate change	Poor	High	Stable	Declining	High	A significant part of the Porthcawl Development Area foreshore is at risk from tidal flooding during a flood event (1 in 200 year return period). Coastal defences are of poor quality in some locations and flood risk is likely to worsen without implementation of the plan.
8	To reduce contamination and safeguard soil quality and quantity	Poor	Medium	Stable	Stable	High	There is a history of contamination in the study area from previous land uses. Without development of land in the area there is likely to be less possibility of remediation of contaminated land.
9	To make the best use of land in Porthcawl including re-use of previously developed land and existing buildings	Good	High	Improving	Stable	Moderate	An average of 78% of all new housing in Porthcawl has been built on previously developed land since 2001.
10	To protect and enhance biodiversity and geodiversity, including flora and fauna that are important on an international, national and local scale	Moderate	Medium	Declining	Declining	Moderate	No designated sites are located within the study area. However, the coastal sand dunes provide at the eastern end of Sandy Bay are a BAP habitat. The dunes are currently eroding in some places, and future development in the Porthcawl area is likely to have a negative effect on non-designated habitats and species without intervention.
11	To maintain and improve the quality and quantity of ground waters and coastal and bathing waters	Good	High	Stable	Stable	High	Coastal water quality is currently excellent within Sandy Bay and is likely to remain so with or without implementation of the plan.
12	To reduce all forms of air pollution in the interests of local air quality and the integrity of the atmosphere	Good	Medium	Stable	Stable	High	Air quality within Porthcawl is currently good and is likely to remain so with or without implementation of the plan.
13	To reduce greenhouse gas emissions	?	?	?	Declining	Low	Although local emissions of greenhouse gases are unknown, emissions are likely to increase with additional housing and residents in the Porthcawl area.

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SA Objective		Local Baseline		Trends		Data quality	Commentary
		Condition	Sensitivity	Current	Future		
14	To protect and enhance the quality and distinctiveness of the built and maritime environment in Porthcawl	Moderate	Medium	Stable	Declining	Medium	There is potential for future development within Porthcawl to have a negative effect upon the character of the Porthcawl Conservation Area without implementation of the plan.
15	To maximise efficiency of water use in new development	?	?	?	?	?	No data is currently available on the efficiency of water use in new development in Porthcawl.
16	To promote the use of material and products produced by sustainable methods in the construction of new development	?	?	?	Improving	Low	Current data and trends are unknown. However, SPD for Climate Neutral development is nearing adoption and should help to improve the use of sustainable construction practices in the future.
17	To minimise the need for energy, increase energy efficiency and to increase the use of renewable energy	?	?	?	Improving	Low	No local data is available on the use of renewable energy use. Given the drive from the EU and EU targets the situation should improve in the future.
18	To maintain and enhance the quality and character of the landscape, including its contribution to the setting and character of Porthcawl	Poor	High	Declining	Declining	High	The character of the area is contributed to by the beach and the dunes. The dunes are currently eroding which is likely to continue into the future without intervention.
19	To reduce the generation of waste and encourage re-use and recycling of waste in Porthcawl	Good	Medium	Improving	Improving	High	Given the drive from national government, the EU and EU targets the situation should improve in the future.
20	To ensure that opportunities are provided to encourage a vibrant local economy, supporting diversification and entrepreneurship	Moderate	Medium	Stable	Declining	Low	Although there are no specific statistics for Porthcawl, in general terms across Bridgend new business formation is below national averages and it is apparent that there are relatively few new businesses established in the town centre itself. Analysis of employment by sector demonstrates a high reliance on service sector, thus pointing to a need for greater diversification, particularly away from seasonal activities. It is considered likely that a contraction in tourism activity would result in a declining local economy.

Sustainability Appraisal Report

SA Objective		Local Baseline		Trends		Data quality	Commentary
		Condition	Sensitivity	Current	Future		
21	To maintain, promote and reinforce the role of Porthcawl as a tourist destination and district centre	Moderate	Medium	Declining	Declining	Low	The role of Porthcawl as a tourist destination is currently declining and is likely to continue to decline without implementation of the plan. Similarly, the ability of the town to act as an effective service centre is increasingly threatened by competition from other settlements, particularly Bridgend.
22	To ensure that development contributes to the vitality and viability of Porthcawl town centre	Moderate	Medium	Declining	Declining	Low	Porthcawl's economy is strongly driven by the tourism sector, which is seasonal in nature and in general decline. In addition, the town centre is struggling to compete with higher order retail and services in other settlements (Bridgend, Swansea, Cardiff), which are drawing spending out of the local economy. This is likely to continue, especially in the context of current investment in regeneration and retail development in both Cardiff and Swansea.
Key:	Current Conditions: Good/Moderate/Poor						
	Current Trends: Improving/Stable/Declining						
	Future Trends (without the plan): Improving/Stable/Declining						
	Sensitivity to Change: High/Medium/Low						
	Data Quality: High/Medium/Low						

4. Compatibility Assessment between the SPG Objectives and SA Objectives

INITIAL COMPATIBILITY ASSESSMENT

- 4.1 Stage B1 of the SA process requires the objectives of the SPG to be tested for compatibility with the SA objectives. This will help in refining the SPG objectives.
- 4.2 Having produced a SA Framework in the previous section there is now the need to assess how this compares with the objectives of the SPG. The SPG's objectives are:
- ◆ Optimises the development and investment potential of the area;
 - ◆ Re-discovers the town's relationship with its waterfront;
 - ◆ Is practical and robust yet flexible;
 - ◆ Enhances the character of the Conservation Area;
 - ◆ Secures the delivery of an enhanced harbour area;
 - ◆ Facilitates the long-term coastal defences of Porthcawl;
 - ◆ Enhances Porthcawl's attractiveness as a tourist destination,
 - ◆ Creates distinctive entrance and gateway spaces that act as a focus for new development;
 - ◆ Utilises open spaces to add form and character to the area;
 - ◆ Creates the opportunity for vibrant and well-used urban spaces associated with distinctive new spaces;
 - ◆ Provides the opportunity for a range of high-quality residential and tourist accommodation at a range of densities;
 - ◆ Provides a range of community facilities;
 - ◆ Secures development which is more sustainable;
 - ◆ Creates an environment with good public transport and pedestrian linkages, thereby reducing car dependency;
 - ◆ Provides the appropriate level of access and parking to facilitate the development;
 - ◆ Is capable of being implemented in stages, where each phase can be economically serviced and completed; and
 - ◆ Establish a planning and development process that will deliver the quality expected.
- 4.3 Table 4.1 provides an initial compatibility matrix to identify to what extent the central regeneration objectives of the SPG are compatible with the draft SA objectives, and vice versa.

SA Objectives

- 1 To ensure the development area is fully accessible and well served by sustainable modes of transport
- 2 To ensure that the housing mix and choice in the development area reflects the needs of the local population, including the provision of affordable housing
- 3 To promote safe environments and contribute to a reduction in the fear of crime
- 4 To promote community health and well being
- 5 To ensure access to educational and training opportunities for all
- 6 To enhance existing and promote the development of new high quality leisure, recreation and open space
- 7 To ensure that new development takes into account the effects of climate change
- 8 To reduce contamination and safeguard soil quality and quantity
- 9 To make the best use of land in Porthcawl including re-use of previously developed land and existing buildings
- 10 To protect and enhance biodiversity and geodiversity, including flora and fauna that are important on an international, national and local scale
- 11 To maintain and improve the quality and quantity of ground waters and coastal bathing waters
- 12 To reduce all forms of air pollution in the interests of local air quality and the integrity of the atmosphere
- 13 To reduce greenhouse gas emissions
- 14 To protect and enhance the quality and distinctiveness of the built and maritime environment in Porthcawl
- 15 To maximise the efficiency of water use in new development
- 16 To promote the use of material and products produced by sustainable methods in the construction of new development
- 17 To minimise the need for energy, increase energy efficiency and to increase the use of renewable energy
- 18 To maintain and enhance the quality and character of the landscape, including its contribution to the setting and character of Porthcawl
- 19 To reduce the generation of waste and encourage re-use and recycling of waste in Porthcawl
- 20 To ensure that opportunities are provided to encourage a vibrant local economy, supporting diversification and entrepreneurship
- 21 To maintain, promote and reinforce the role of Porthcawl as a tourist destination and district centre
- 22 To ensure that development contributes to the vitality and viability of Porthcawl town centre

- 4.4 Table 4.1 shows that the SPG objectives are compatible with the SA objectives in some cases, and in others they are less so. In a number of cases, the wording of the SPG objectives is too vague thus an assessment has been difficult. This is partially due the nature of implementation measures being a determining factor as to whether SPG objectives are compatible with SA objectives. In many cases, as implementation measures will only become known once the SPG is fully developed they will be assessed in the next appraisal stage.
- 4.5 SPG objective 1, 7 and 12 are vague thus outcomes are uncertain at this stage with the exception of potential positive economic effects.
- 4.6 SPG objectives 2, 4, 6, 8, 9 and 14 are clear, with specific issues addressed. These objectives are broadly compatible with the SA objectives, subject to more detailed proposals which will be developed at a later stage.
- 4.7 The relationship between urban space and open space in SPG objective 10 is unclear. For assessment purposes it has been assumed that urban space is equivalent to public realm although this should be made clearer in the objective, which is broadly compatible with the SA objectives.
- 4.8 SPG objective 11 could be improved through adding the need to provide a range of tenure and prices alongside housing densities. Additionally the meaning of 'quality' could be qualified with 'sympathetic to the character of the existing built environment'.
- 4.9 SPG objective 13 provides an opportunity to improve the sustainability of development but could be expanded to include more specific objectives, such as reducing the need to travel and protection of the natural environment.
- 4.10 SPG objectives 3, 16 and 17 do not specify clear land use objectives and are more focused on the plan making process, and have thus no been assessed with relation to the SA objectives.
- 4.11 Potential conflicts arise specifically with SPG objectives 5 and 15. Objective 5 seeks to enhance the harbour area. In reference to 'enhancing the harbour area', there may be potential conflicts with soil quality and contamination due to the large amounts of soil that may potentially be excavated from other areas and transferred to the development site. Similarly this may affect the integrity of the biodiversity and geodiversity of the area and its surroundings. Development close to the waters edge may also increase the risk to coastal and bathing waters through direct contact with contaminants from the associated activity that may arise through development. These issues will be the subject of further assessment during the assessment of strategic options and preferred options of the SPG.
- 4.12 SPG objective 15 seeks to encourage the provision of parking to facilitate development. This potentially conflicts with SA objectives 1,7,10 and 11. The provision of car parking may increase surface water run off as well as potentially encouraging less sustainable modes of transport which may lead to an increase in air pollution and greenhouse gas emissions. In order to improve this objective, it could be refined in a number of ways. The wording could be modified to include appropriate levels of parking that would discourage the use of the private car, but not hinder economic development.

5. Strategic Options

INTRODUCTION

- 5.1 As part of the SPG under preparation there were two broad options being proposed for the Porthcawl area: Option A - Enlarged Marina with Enlarged Food store and Option B - Reduced Marina with Enlarged Food store. The main difference between the two options was the size and location of the proposed marina.
- 5.2 These options were the subject of a comparative assessment concentrating on their likely effects on the Kenfig/Cynffig SAC, in particular on the Merthyr Mawr SSSI section of the Kenfig/Cynffig SAC located to the east of the study area (see Figure 3.2). An Appropriate Assessment (AA) Screening exercise was undertaken in order to satisfy the necessary regulatory requirements on AA of plans. A separate report has been prepared documenting the results of the AA screening exercise (see Appendix C) and this section highlights how the results of this exercise have informed option selection by BCBC.

DESCRIPTION OF OPTIONS CONSIDERED

OPTION A - ENLARGED MARINA WITH ENLARGED FOOD STORE

- 5.3 Option A is shown in Figure 5.1. Details for the proposed development at Porthcawl show that the eastern half of the area would be made up of residential use, varying from 2-3 storey town houses to the north and 2–5 storey flats and town houses in the south and facing on to Sandy Bay. This side of the development is the area closest to the Merthyr Mawr SSSI section of the Kenfig/Cynffig SAC.
- 5.4 In the central section of the development area, 2-3 storey residential areas would be to the north. To the south and facing Sandy Bay there would be 2-5 storeys mixed use commercial and residential development, with densities ranging from 80 – 120 units/ha.
- 5.5 In the western section of the development area, residential development would extend from the north to the south along the eastern edge. It would be 3-5 storey at a density of 120 units/ha.
- 5.6 The remainder of the area would be mixed use commercial and residential, 3-6 storeys with densities of 80-135 units/ha. The plot with the highest heights and densities would be the southern most development, facing on to the marina. In the western section there would also be a food store, retail and retail parking.
- 5.7 Within Sandy Bay itself the proposed development would include an enlarged marina which would occupy approximately one third of the bay and extend out to the western breakwater.

OPTION B - REDUCED MARINA WITH ENLARGED FOOD STORE

- 5.8 Option B is shown in Figure 5.2. All development in Option B would be the same as Option A except for two features. In Option B the marina would be located in the original harbour and would not extend into Sandy Bay. In addition the 2-5 storey mixed use commercial and residential development, with densities ranging from 80 – 120 units/ha would be set back to the natural line of the bay.

Figure 5.1 - Option A - Enlarged Marina & Enlarged Food store

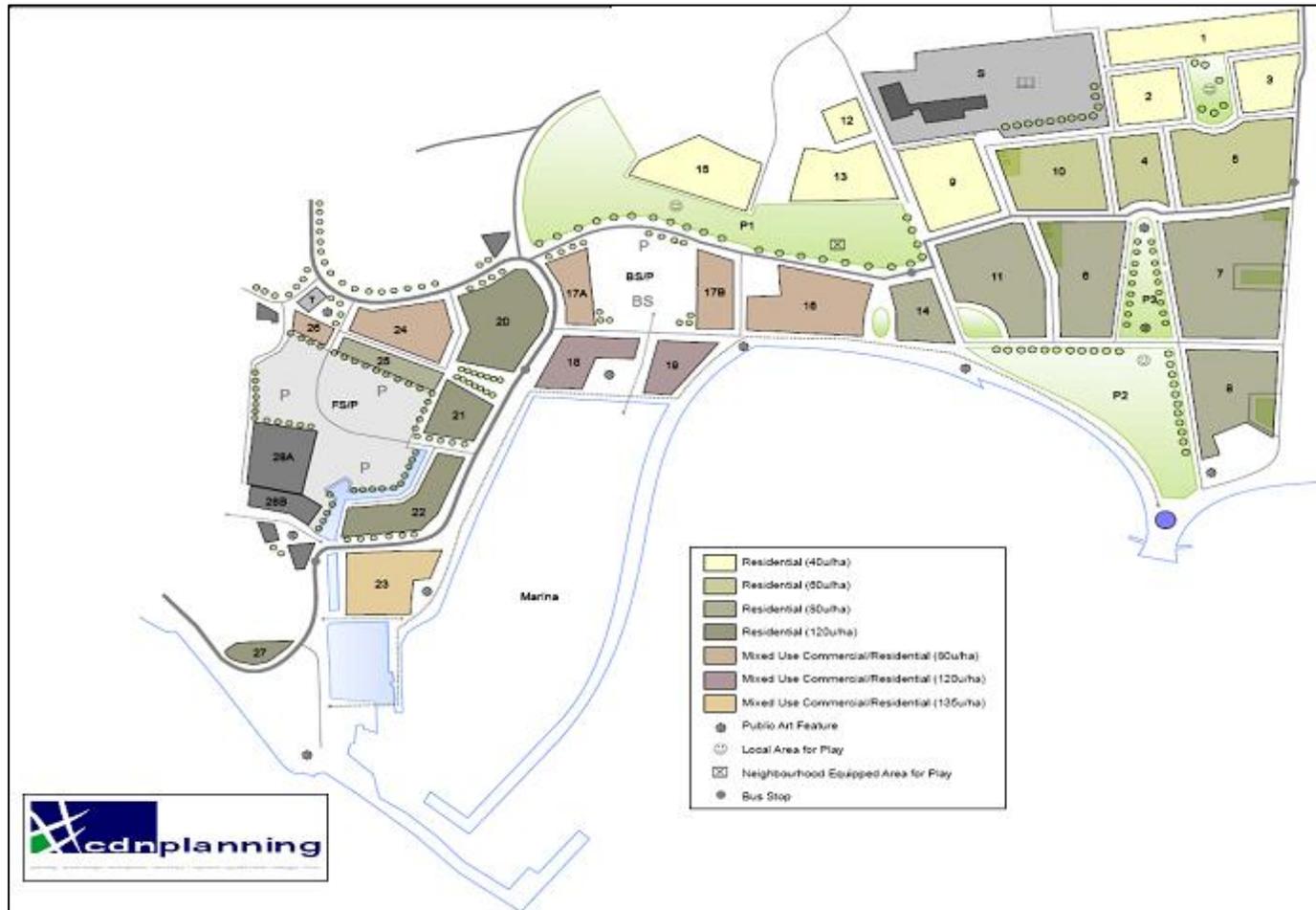
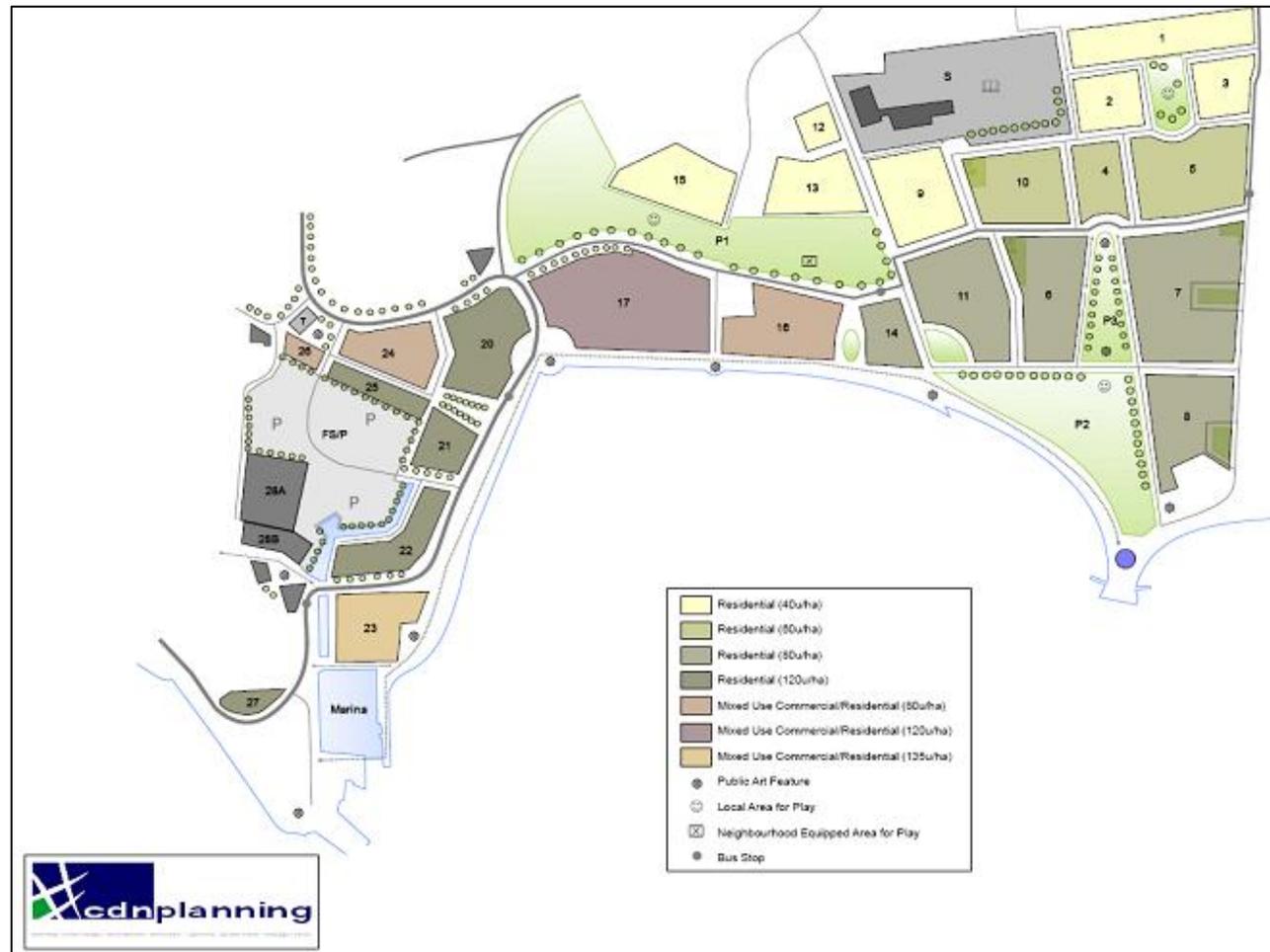


Figure 5.2 - Option B - Reduced Marina with Enlarged Food store



APPROPRIATE ASSESSMENT SCREENING RESULTS

5.9 The results of the screening exercise have identified two potential processes that could cause effects on the Kenfig/Cynffig SAC as a result of implementing the SPG for Porthcawl Regeneration Development Area. These processes are:

- ◆ Sediment transportation pathways and linkages; and
- ◆ Hydrological pathways and processes.

5.10 In order to assess the implications of the SPG on the SAC's conservation objectives, each of the qualifying habitats or species listed in the Kenfig/Cynffig SAC designation were considered in turn and the potential effect of development on these habitats and species was considered. The qualifying habitats and species of the SAC considered were:

- ◆ Fixed dunes with herbaceous vegetation (grey dunes);
- ◆ Dunes with *Salix repens* ssp. *Argentea* (*Salicion arenariae*);
- ◆ Humid dune slacks;
- ◆ Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.;
- ◆ Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*);
- ◆ Petalwort (*Petalophyllum ralfsii*); and
- ◆ Fen orchid (*Liparis loeselii*).

5.11 The main outcomes of the assessment were as follows:

Option A

5.12 If Option A was selected a full Appropriate Assessment would be necessary to consider:

- ◆ The hydrological process linked to the Merthyr Mawr SSSI and how construction in the Porthcawl Regeneration Development Area and the associated change in land use would affect the quality and quantity of groundwater in the Merthyr Mawr SSSI section of the Kenfig/Cynffig SAC; and
- ◆ The sediment transportation process that operates on this section of the coast and how the development of an enlarged marina would affect the sedimentation transportation process, in particular, if additional erosion of the beach and dune systems is likely to be caused.

Option B

5.13 If Option B was selected (with a reduced marina) only the following would require further consideration:

- ◆ The hydrological process linked to the Merthyr Mawr SSSI and how construction in the Porthcawl Regeneration Development Area and the

associated change in land use would affect the quality and quantity of groundwater in the Merthyr Mawr SSSI section of the Kenfig/Cynffig.

- 5.14 A hydrogeological desk study (see Appendix D) was subsequently carried out as part of the AA focussing on two potential effects:
- ◆ The possibility that the groundwater regime (groundwater elevations and flow patterns) in the vicinity of the Merthyr Mawr SSSI could be altered as a result of the proposed development, which could affect the ecology on the SSSI in terms of the amount of water available for species present; and
 - ◆ The possibility that the groundwater quality in the vicinity of the Merthyr Mawr SSSI could be altered as a result of the proposed development if there is considered to be a potential migration pathway for any contaminants present beneath the development site to reach the SSSI.
- 5.15 The study concluded that due to the distance (0.75 km) the Merthyr Mawr SSSI will not receive direct runoff from the development site and infiltration and migration is unlikely to be a significant migratory pathway. It is also likely that groundwater flow in the Blown Sand / Oxwich Head Limestone is towards the sea / estuary and in discrete hydrological units governed by the fault blocks and not parallel to the coast.
- 5.16 As such, the hydrological regime (groundwater levels and flow directions) at the SSSI are highly unlikely to be affected. Therefore, there is no potential pollution risk or reduction in groundwater quality issues for the SSSI from the proposed land based development at Porthcawl.

THE PREFERRED OPTION

- 5.17 It is not the role of the SA to determine which of the options should be chosen as the basis for the preferred option. This is the role of the local authority, the community and stakeholders who have to decide which option is appropriate. The SA should, however, help identify the most sustainable option overall, or different options that promote the different dimensions of sustainability (social, environment, and economic).
- 5.18 The results of the AA Screening Exercise were instrumental in the identification of the preferred option by BCBC which no longer includes a new enlarged marina. Instead a comprehensive refurbishment of the existing harbour will take place.

6. Assessment of Significant Effects of the SPG

INTRODUCTION

- 6.1 This task comprises systematic prediction of changes to the sustainability baseline arising from the SPG's preferred options. These are compared both with the 'do nothing' or 'business as usual' scenario. As required by the SEA Directive, predicted effects must be fully characterised in terms of their magnitude, the time period over which they occur, whether they are permanent or temporary, positive or negative, probable or improbable, frequent or rare, and whether there are cumulative and/or synergistic effects. Ideally, the effects of the evolving plan should be predicted and assessed during the plan-making process to ensure that the final plan is as sustainable as possible.
- 6.2 The SEA Directive states that in the Environmental Report:
- 'The likely significant effects on the environment of implementing the plan or programme....and reasonable alternatives....are [to be] identified, described and evaluated' (Article 5.1). The Environmental Report should include information that may 'reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme [and] its stage in the decision-making process' (Article 5.2).*
- 6.3 In addition, the SEA Directive requires the Environmental Report to outline measures to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme (Annex I (g)).
- 6.4 Existing SA guidance recognises that the most familiar form of SA prediction and evaluation is generally broad-brush and qualitative. It is recognised that quantitative predictions are not always practicable and broad-based and qualitative predictions can be equally valid and appropriate. This section outlines the SPG preferred options that have been assessed and provides an assessment of the options.

SPG PROPOSALS TO BE ASSESSED

- 6.5 Figure 6.1 shows the three overall development areas, whilst Figure 6.2 shows the 10 character areas which have formed the basis for the assessment of significant effects in this SAR.

Figure 6.1 – Development Concept Areas

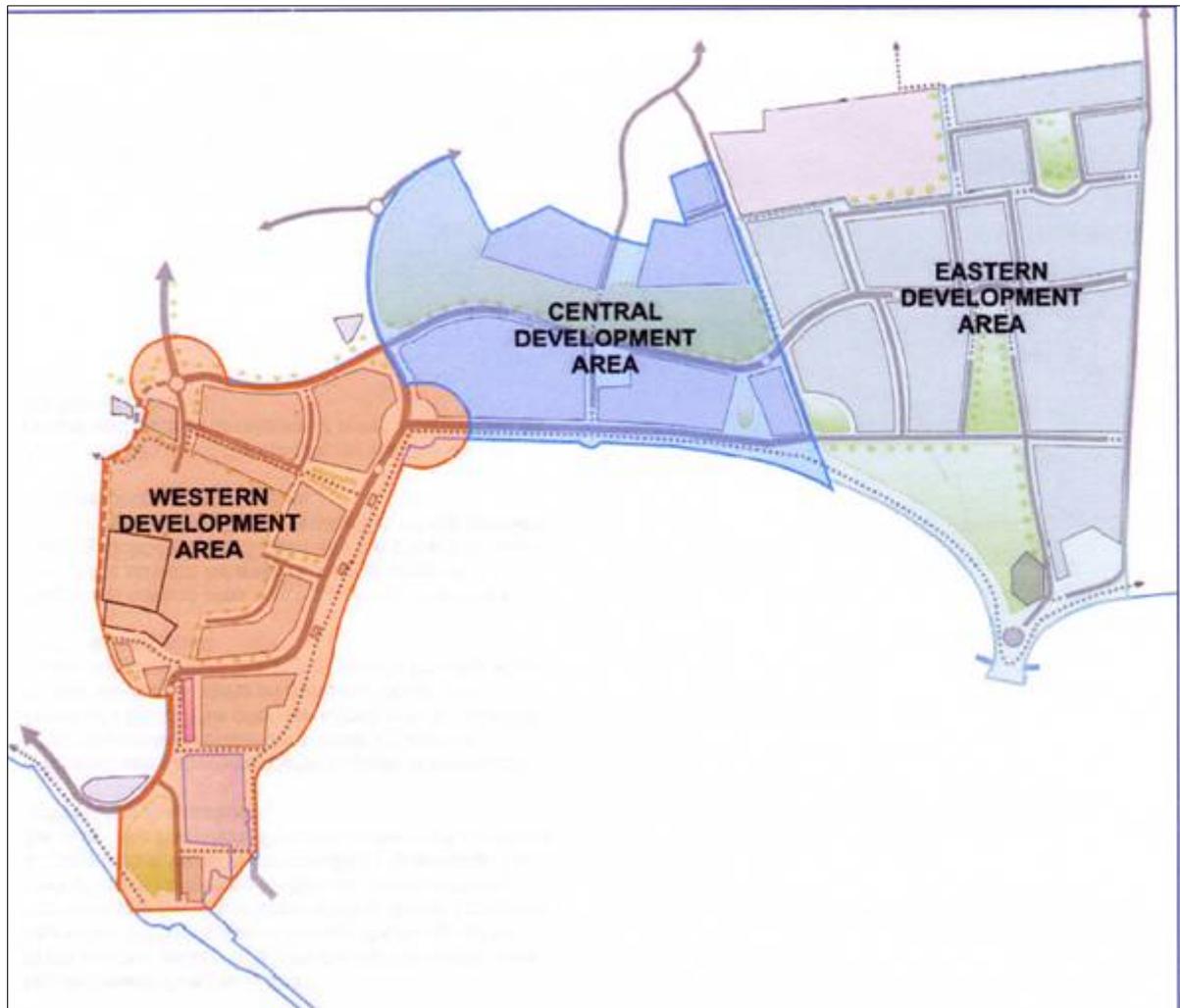
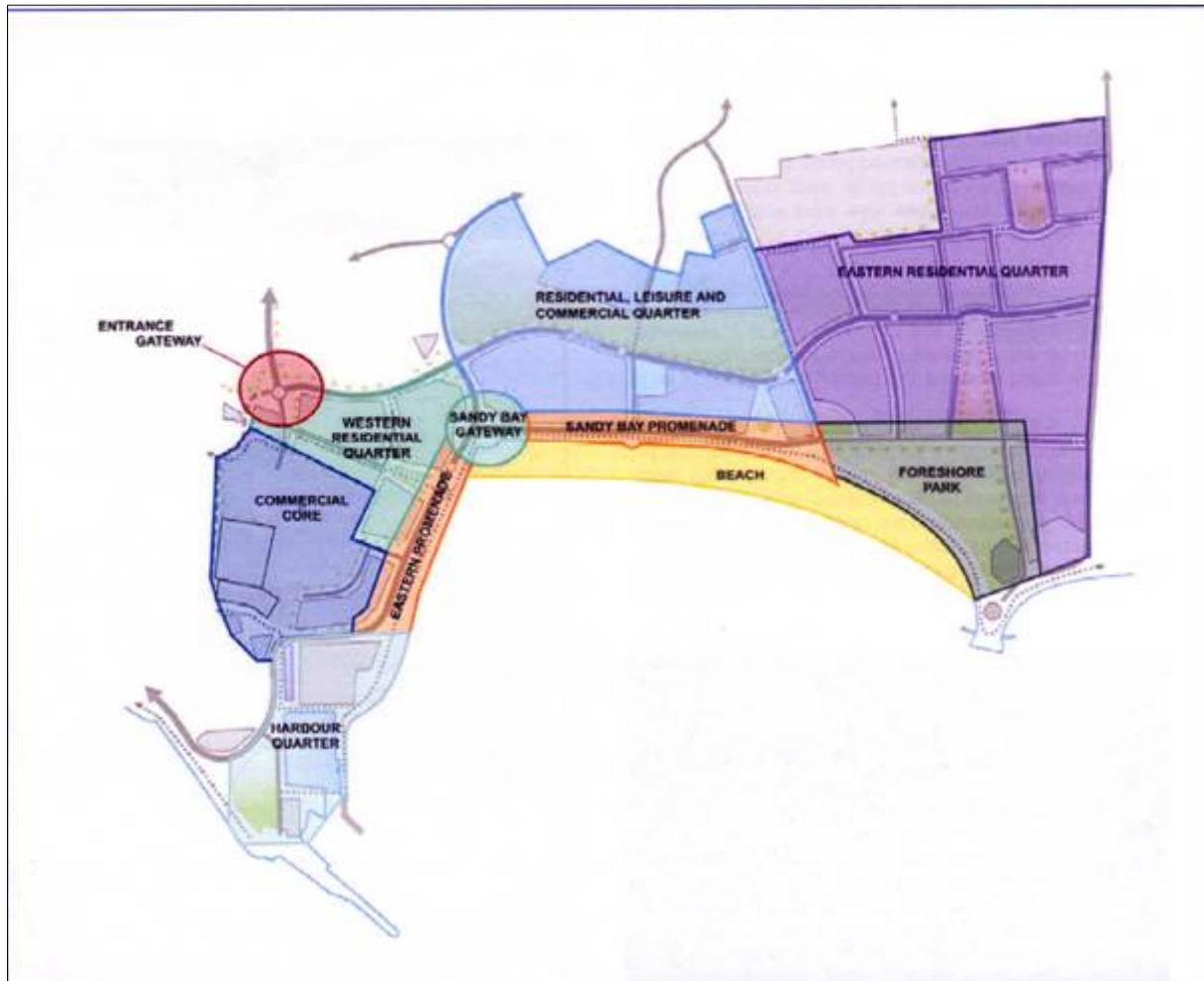


Figure 6.2 – Key Character Areas



SPG Components

- 6.6 A brief description of the SPG components are set out below under the three concept areas, which in turn cover the 10 character areas as shown above in Figures 6.1 and 6.2.

Western Development Area

- ◆ Harbour quarter – with improved harbour, leisure centre and public open space;
- ◆ Commercial core – 50,000 sq. ft food store and car park, retail units and mixed use residential units of the seafront with enhanced eastern promenade providing a pedestrian and cycling route and flood defence;
- ◆ Entrance gateway – signature building for the northern entrance to the town;
- ◆ Western residential quarter – a variety of housing with building heights ranging from maximums of 3 to 6 storeys, taking advantage of the seafront/bay views; and

- ◆ Eastern promenade - primary vehicle and bus route with provision for cyclists. The promenade will also incorporate kiosks and attractions, parking, including disabled parking and wide area for pedestrian route. The promenade will provide flood defence to the western development area.

Central Development Area

- ◆ Residential, leisure and commercial quarter – mixed use retail/restaurant, office and residential buildings along the Sandy Bay Promenade with maximum building heights of 6 storeys, extended and enhanced Griffin Park extending from east to west across the development area and low density 2-3 storey residential units in the north of the area to integrate with existing development; and
- ◆ Sandy Bay Promenade – 10-11.5 m wide promenade providing a pedestrian and cycle route across the development area and linking the three development areas across the bay. The promenade will also provide flood defence with stepped revetments and sand covered block stone revetments on its seaward side.

Eastern Development Area

- ◆ Eastern residential quarter – a range of residential units with higher density and building heights in the south decreasing in height and density back to 2-2.5 storey town houses in the north to integrate with existing development. Will also feature areas of public open space; and
- ◆ Foreshore park – integration of the built environment with the natural environment, this character area contains some residential buildings, high density and highest building heights (maximum 6 storey) but dominated by the soft landscaping of the park abutting the Bay.

- 6.7 Throughout the regeneration area residential buildings the BRE EcoHomes standard of “Very Good” is highly desirable and in appropriate areas solar water heaters/PV cells and/or mini wind turbines will be installed. Developers should also be expected to bring forward proposals for a proportion of the open market units to be built to an “Excellent” BRE EcoHomes standard. High BREEAM standards should also be set for the non-residential developments. (*Note: BREEAM Standards will be replaced by levels of adherence to the Code for Sustainable Homes*).
- 6.8 In the public realm lighting should be energy efficient and appropriate public art will be commissioned.
- 6.9 The assessment itself has been carried out on the overall effect of each development concept area, rather than the 10 character areas in order to eliminate unnecessary repetition.

ASSESSMENT ASSUMPTIONS AND RATIONALE

- 6.10 As already discussed in Section 2 on methodology, the assessment undertaken relies heavily on professional judgement which has necessarily an element of subjectivity. It also relies on certain assumptions about the changes to people’s behaviour as a result of the policies being assessed and the way development will be

implemented. The assessment was undertaken taking into account the following considerations outlined in Table 6.1.

Table 6.1 - Assessment Rationale

SA Objective		Assessment Rationale
1	To ensure the development area is fully accessible and well served by sustainable modes of transport	Consideration of the extent to which proposals or methods provide sustainable modes of transport, or promote the use of such modes and restrict the use of cars, by their location, quality of the pedestrian environment, design, or information provision.
2	To ensure that the housing mix and choice in the development area reflects the needs of the local population, including the provision of affordable housing	Consideration of the extent to which proposals would increase or decrease the supply and quality of housing appropriate to local needs and affordability.
3	To promote safe environments and contribute to a reduction in the fear of crime	Consideration of the degree to which proposals would reduce crime and the fear of crime through indirect measures such as design of the built environment. Direct effect on reducing vehicle, burglary and violent crime rates was also assessed.
4	To promote community health and well being	Consideration of proposals which improve access to health facilities, and indirectly improve health for all. Secondary consideration of reducing air pollution, ensuring homes are of a decent standard, and other indirect or longer-term effects upon health. Secondary effect was also considered of improving walking and cycling infrastructure and the positive effect on improving levels of health.
5	To ensure access to educational and training opportunities for all	Consideration of whether proposals would directly provide educational, training and learning facilities for the local population, or indirectly provide opportunities for learning (e.g. nature trails) or improve accessibility to educational or learning facilities.
6	To enhance existing and promote the development of new high quality leisure, recreation and open space	Consideration of whether the proposals directly improve the quantity or quality of open space in Porthcawl, or provide better information, accessibility and improve its attractiveness and its value in the community.
7	To ensure that new development takes into account the effects of climate change	Consideration of whether proposals would have positive or negative effects on tidal and fluvial flood risk. Consideration of whether proposals are vulnerable to flooding and other climate change effects. Consideration of direct or indirect effects on reducing the risk of flooding and other climate change effects, e.g. by using sustainable drainage systems.
8	To reduce contamination and safeguard soil quality and quantity	Consideration of how proposals would reduce or increase soil contamination and safeguard soil quality and quantity.
9	To make the best use of land in Porthcawl including re-use of previously developed land and existing buildings	Consideration of the extent to which the proposals would make the best use of land and buildings. Consideration was also given to indirect effects, such as improving

SA Objective		Assessment Rationale
		accessibility since this can allow more intensive land uses.
10	To protect and enhance biodiversity and geodiversity, including flora and fauna that are important on an international, national and local scale	Consideration of whether proposals may have a positive or negative effect on designated and locally important habitats and species (either through fragmentation or proximity effects), and sites designated for their geological importance. Additional consideration of whether the proposals result in the conservation, enhancement or creation of habitats.
11	To maintain and improve the quality and quantity of ground waters and coastal and bathing waters	The extent to which proposals will have positive or negative effects on maintaining and improving the quality of surface and ground waters. Consideration was given to aspects such as surface water run-off from impermeable surfaces and proximity to water courses.
12	To reduce all forms of air pollution in the interests of local air quality and the integrity of the atmosphere	Consideration of whether proposals would result in reductions or increases in traffic- and industry- derived pollutant concentrations and carbon dioxide emissions. Predicted changes in road traffic numbers and the effect on the concentrations of certain pollutants (NO ₂ and PM ₁₀). Secondary effect of the use of more sustainable modes of transport, reductions in vehicle use, and changes in industrial activities and locations, leading to improvements in air quality.
13	To reduce greenhouse gas emissions	Consideration of whether proposals would result in reductions or increases, and to what extent, in carbon dioxide emissions.
14	To protect and enhance the quality and distinctiveness of the built and maritime environment in Porthcawl	Effect of proposals on the local built environment and whether proposals have the potential for effects on streetscape and townscape character. Consideration of proposals to promote high quality design within new or refurbished development.
15	To maximise efficiency of water use in new development	Consideration of whether proposals are efficient in their use of water.
16	To promote the use of material and products produced by sustainable methods in the construction of new development	Consideration of whether proposals use sustainable materials and methods in their construction.
17	To minimise the need for energy, increase energy efficiency and to increase the use of renewable energy	Consideration of whether proposals directly reduce energy demand and incorporate renewable energy. Consideration was also given to indirect effects, e.g. development located to reduce transport distances.
18	To maintain and enhance the quality and character of the landscape, including its contribution to the setting and character of Porthcawl	Consideration of whether new development, including factors such as building heights will impact on landscape character, views and vistas. Development should ensure sympathetic integration of new development with existing features.
19	To reduce the generation of waste and encourage re-use and recycling of	Consideration of whether proposals directly reduce the generation of waste and recycling of waste against

SA Objective		Assessment Rationale
	waste in Porthcawl	standard levels expected for development, e.g. by providing recycling facilities within and near to homes. Consideration was also given to construction waste reduction, re-use and recycling.
20	To ensure that opportunities are provided to encourage a vibrant local economy, supporting diversification and entrepreneurship	Consideration of whether proposals directly increase the opportunities for employment, diversification and investment or indirectly by supporting existing businesses or creating the potential for further employment growth.
21	To maintain, promote and reinforce the role of Porthcawl as a tourist destination and district centre	Consideration of whether proposals aim to develop and enhance Porthcawl's niche as a tourist destination and district centre taking into account local needs and the economic and retail services provided by surrounding areas.
22	To ensure that development contributes to the vitality and viability of Porthcawl town centre	Consideration of whether proposals aim to add to the economic diversity of the area and unique events and facilities that it can provide.

ANALYSIS OF RESULTS

- 6.11 Appendix E presents the results of detailed appraisal of the potential effects of the SPG predicted to arise from implementation of the proposals for each development area. The sections below present an analysis of the detailed assessment in terms of the significance of direct effects and potential cumulative effects. Suggestions for mitigation of adverse effects, and recommendations for improvements to the SPG are set out in Section 7.
- 6.12 Table 6.2 presents a summary of the significance of direct effects from the detailed appraisal.

Significant Positive Effects

- 6.13 Significant positive effects are predicted from the implementation of the SPG against the majority of social and economic objectives, and some environmental objectives. Significant positive effects are predicted against SA objectives in relation to improving access and sustainable transport; improving housing mix and affordable housing; promoting safe environments and reducing the fear of crime; promoting community health and well being; enhancing existing and promoting the development of new high quality leisure, recreation and open space; reducing contamination; encouraging a vibrant local economy; promoting Porthcawl as a tourist destination and ensuring that development contributes towards the vitality and viability of Porthcawl.

Slight Positive Effects

- 6.14 Slight positive effects are predicted from the implementation of the SPG against SA objectives in relation to improving education and training and promoting the use of sustainable products and resources.

Positive and Negative Effects

- 6.15 Both positive and negative effects are predicted against SA Objective 17 (To minimise the need for energy, increase energy efficiency and to increase the use of renewable energy). The implementation of the SPG is predicted to have a moderate positive and slight negative effect in all three development areas, due to the strong emphasis placed on using energy efficient lighting in the public realm, EcoHomes “very good” standard being promoted for all residential buildings and inclusion of micro wind turbines or PV/solar water heater cells for appropriate buildings. However the increase in population is likely to cause an increase in energy demand.
- 6.16 SA Objective 18 (To maintain and enhance the quality and character of the landscape, including its contribution to the setting and character of Porthcawl) is predicted to have a slight negative effect in relation to landscape character. This is due to the increase in building height as part of the residential and mixed use buildings, leisure centre and food store as well as the degree change caused by the new car park many of which are either within or adjacent to Porthcawl’s conservation area and listed sea walls. This applies to the eastern and western development areas. The development which takes place as part of the Porthcawl Waterfront SPG will lead to a significant change in the character of the area, however the current low quality of the landscape has meant a significant change will only have a slight negative effect. In the central development area the predicted effect is slight positive from the enhancement of Griffin Park, but also slight negative the development of 5-6 storey buildings on the seafront.
- 6.17 SA Objective 7 (To ensure that new development takes into account the effects of climate change) is predicted to have a moderate positive and slight negative effect as flood defences will be enhanced however there will be an increase in the area of land covered with impermeable surfaces. There are no references to the use of SuDS and an increase in population in the area will mean more people are put at risk if the flood defences fail, presenting a degree of ‘residual risk’ that will always remain in development areas protected by flood defences.
- 6.18 SA objective 11 (To maintain and improve the quality and quantity of ground waters and coastal and bathing waters) and SA Objective 15 (To maximise efficiency of water use in new development) could both have a slight positive and slight negative effects in all three development areas, as EcoHomes “very good” will be promoted, however there is no direct reference to water measures themselves or the use of SuDS. There is a potential for negative effects on water quality through new housing and employment development, including new transport infrastructure, through an increase in impermeable surfaces and traffic based pollutants. Without adequate mitigation, there is the potential for contaminated runoff, both during construction and operation, to result in contamination of groundwater and coastal waters.
- 6.19 SA Objective 12 (To reduce all forms of air pollution in the interests of local air quality and the integrity of the atmosphere) is predicted to have a slight positive and also slight negative effect in all three development areas, due to the strong promotion of walking, cycling and public transport but the associated increase in population is likely to cause an increase in air pollution. New facilities such as the food store and leisure centre are likely to draw in visitors in larger numbers than the current facilities, with associated traffic and air quality effects.

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- 6.20 SA Objective 13 (To reduce greenhouse gas emissions) in all three development areas) is predicted to have slight positive and slight negative effects in all three development areas, due to the strong promotion of walking, cycling and public transport which could potentially decrease greenhouse gas emissions. However the increase in population will cause an increase in net emissions.
- 6.21 In all three development areas slight positive and slight negative effects are predicted against SA Objective 14 (To protect and enhance the quality and distinctiveness of the built and maritime environment in Porthcawl), due to the acknowledgement of an aim to conserve and enhance the character of Porthcawl and base new public art on the local history and nautical them. However building heights of the new development are likely to contrast sharply in relation to existing buildings.
- 6.22 SA Objective 19 (To reduce the generation of waste and encourage re-use and recycling of waste in Porthcawl) is predicted to have a slight positive and slight negative effect in all three development areas, due to the recognition in the design guidance to make allowances for reuse storage including the need to have separate storage for recycling, which may encourage recycling, however the increase in population in the area will cause an associated increase in waste requiring disposal.

Table 6.2 - Summary of the Assessment of the SPG²

		Western Development Area	Central Development Area	Eastern Development Area	Overall Assessment of Significance
SA Objectives	1.	Access and sustainable transport	+++	+++	+++
	2.	Housing mix and affordable housing	++	++	++
	3.	Safe environments	++	++	++
	4.	Health and well being	++	++	+
	5.	Educational and training	0	0	++
	6.	Leisure, recreation and open space	++	++	++
	7.	Climate change	++/-	++/-	++/-
	8.	Contamination	+	+	+
	9.	Best use of land	++	++	+
	10.	Biodiversity and geodiversity	++	++/-	++
	11.	Ground and coastal bathing waters	+/-	+/-	+/-
	12.	Air pollution	+/-	+/-	+/-
	13.	Greenhouse gas emissions	+/-	+/-	+/-
	14.	Built and maritime environment	+/-	+/-	+/-
	15.	Water use	+/-	+/-	+/-
	16.	Sustainable products	+	+	+
	17.	Energy use	++/-	++/-	++/-
	18.	Landscape	-	+/-	-
	19.	Waste	+/-	+/-	+/-
	20.	Vibrant economy	++	++	+
	21.	Tourist destination	+	+	+
	22.	Vitality and viability	+++	++	+

² Scores are obtained from the detailed assessments in Appendix E. Scores are taken from the assessment of long term effects.

ASSESSMENT OF CUMULATIVE EFFECTS

6.23 As detailed in Chapter 2, this SAR has considered the cumulative nature of effects throughout the entire SA process. Cumulative effects of the SPG proposal have also been analysed during the appraisal and Table 6.3 shows the results of this analysis.

Table 6.3 - Cumulative Effects of the SPG

Proposal	Effect	Causes	Significance
All	Cumulative effect on increasing overall levels of health and improving access to health facilities.	New health facilities, improvements to walking and cycling infrastructure, leisure/recreation facilities and open space.	Significant positive effect in the long term.
All	Cumulative effect of proposals attracting inward investment and increasing economic diversity.	Effect of all proposals is likely to have a beneficial effect on the image of the area. In turn this may attract additional private sector investment in the area.	Significant positive effects in the long term.

7. Mitigation

- 7.1 The term mitigation encompasses any approach which is aimed at preventing, reducing or offsetting significant adverse environmental effects that have been identified. In practice, a range of measures applying one or more of these approaches is likely to be considered in mitigating any significant adverse effects predicted as a result of implementing the SPG. In addition, it is also important to consider measures aimed at enhancing positive effects. All such measures are generally referred to as mitigation measures.
- 7.2 Mitigation can take a wide range of forms, including:
- ◆ Refining options in order to improve the likelihood of positive effects and to minimise adverse effects;
 - ◆ Technical measures (such as setting guidelines) to be applied during the implementation stage;
 - ◆ Identifying issues to be addressed in project environmental impact assessments for certain projects or types of projects;
 - ◆ Proposals for changing other plans and programmes; and
 - ◆ Contingency arrangements for dealing with possible adverse effects.
- 7.3 However, the emphasis should be in the first instance on proactive avoidance of adverse effects. Only once alternative options or approaches to avoiding an effect have been examined should mitigation then examine ways of reducing the scale/importance of the effect.

GENERAL MITIGATION MEASURES

- 7.4 The following general measures are proposed in order to mitigate the adverse environmental effects identified during the environmental assessment.
- ◆ Noise control measures should be implemented as set out in BS5228-1 during construction activities;
 - ◆ General pollution control measures during construction activities to avoid water and air contamination; and
 - ◆ Sustainable Urban Drainage Systems (SUDS) should form part of site drainage, unless all types of SUDS techniques are unsuitable. It must be ensured that contaminants remaining in the soil are not mobilised: infiltration-based techniques (e.g. soakaways) may not be appropriate in contaminated land, in which case attenuation/evaporation techniques (e.g. lined swales, green roofs) are likely to be suitable.

RECOMMENDATIONS FOR IMPROVEMENTS TO THE SPG

- 7.5 The following changes and additions are recommended to improve the overall sustainability performance of the SPG:
- ◆ Areas of disturbed/contaminated land may require remediation prior to redevelopment. Site investigation and remediation should be in accordance

with the principles of PPS23. This should be highlighted by the SPG as part of development to take place in the Harbour Quarter in particular, as previous and current land use here is the most likely to have caused or lead to contamination;

- ◆ Biodiversity enhancements such as tree planting and measures to integrate biodiversity into new development such as green roofs or roof gardens, should be encouraged, in particular this could include;
 - ◆ Roof gardens for the high density mixed use buildings in the western development area;
 - ◆ Roof garden or green roof for the food store and leisure centre; and
 - ◆ Roof gardens for the high density mixed use development in the central development area along Sandy Bay Promenade.
- ◆ Chapter 3 “Design Guidance for Key Topics” should include a section on water conservation measures. This should show the measures which are promoted to use water efficiently such as SuDS, which harvest rainwater for non potable use, and a specific requirement for all new development to reduce water consumption by 25% when compared to standard levels. It is recognised that the Code for Sustainable Homes will provide further requirements in relation to water efficiency, however it is considered that the SPG could be strengthened by specific reference to water efficiency measures in new development;
- ◆ Section 3.12 “Street Furniture” could be amended to refer to the provision of segregated recycling bins in the public realm which will promote the achievement of recycling targets;
- ◆ Section 3.12 “Street Furniture” and section 3.10 “Paving Materials” greater encouragement of recycled/reclaimed materials should be stated for paving and street furniture; and
- ◆ Section 3.17 “Sustainability and Energy Efficiency” should require all new development to source 10% of their energy requirements from renewable energy rather than promoting overall EcoHomes “very good” or “excellent” standard. It is possible to for new development to achieve high EcoHomes ratings on previously developed land without considering energy efficiency and renewable energy requirements above current Building Regulations. Similarly to the recommendation for water efficiency, it is recognised that the Code for Sustainable Homes will provide further requirements in relation to energy however the SPG could be strengthened further through the setting of quantitative targets for renewable energy generation.

7.6 It is recommended that the Draft Version of the Porthcawl Waterfront SPG is updated to reflect the recommendations above.

8. Monitoring

- 8.1 The SEA Directive states that *'member states shall monitor the significant environmental effects of the implementation of plans and programmes.....in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action'* (Article 10.1). In addition, the Environmental Report should provide information on a *'description of the measures envisaged concerning monitoring'* (Annex I (i)) (Stage E).
- 8.2 SA monitoring will cover significant social and economic effects as well as significant environmental effects and it involves measuring indicators which will enable the establishment of a causal link between the implementation of the plan and the likely significant effects (both positive and negative) being monitored. In line with the SEA Directive, these significant positive and negative effects should be monitored with the implementation of the SPG.
- 8.3 The sustainability appraisal of the SPG has identified significant effects with regards to certain SA objectives which will require monitoring. In addition, the SPG itself requires monitoring of certain areas. The significant effects identified are:
- ◆ Effect on accessibility and sustainable modes of transport (positive)
 - ◆ Effect on housing mix and choice, including the provision of affordable housing (positive)
 - ◆ Effect on creating safe environments and reducing fear of crime (positive)
 - ◆ Effect on improving health and well being (positive)
 - ◆ Effect on enhancing existing and promoting development of new high quality leisure, recreation and open space (positive)
 - ◆ Effect on ensuring that new development takes into account the effects of climate change (positive/negative)
 - ◆ Effect on reducing soil contamination (positive)
 - ◆ Effect on making the best use of land in Porthcawl including re-use of previously developed land and existing buildings (positive)
 - ◆ Effect on protecting and enhancing biodiversity and geodiversity (positive)
 - ◆ Effect on the need for energy, energy efficiency and the use of renewable energy (positive)
 - ◆ Effect on encouraging a vibrant local economy, supporting diversification and entrepreneurship (positive)
 - ◆ Effect on promoting and reinforcing the role of Porthcawl as a tourist destination and district centre (positive)
 - ◆ Effect on the vitality and viability of Porthcawl town centre (positive)
- 8.4 The SA framework (Table 3.5) contains indicators which could be used to monitor significant effects post implementation. These indicators should be used as the basis for preparing the monitoring programme bearing in mind that it will not always be necessary to collect data for all the indicators.

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- 8.5 The SA guidance recommends SA monitoring to be incorporated into Local Authority's existing monitoring arrangements. In accordance with Regulation 48 of the Town and Country Planning Regulations, the Council is required to prepare an Annual Monitoring Report (AMR) to assess the implementation of the Local Development Framework and the extent to which core policies are being achieved and to identify any changes if a policy is not working or if the targets are not met. It is thus important that the Council seeks to integrate the monitoring of the SPG's significant sustainability effects in these wider monitoring arrangements.

9. Conclusion

- 9.1 The Porthcawl SPG has been the subject of a Sustainability Appraisal incorporating Strategic Environmental Assessment and positive significant effects, particularly social and economic regeneration effects to the Porthcawl area, have been identified.
- 9.2 The findings of this assessment conclude that the sustainability performance of the SPG could be further improved by taking account of the recommendations contained in this report. Particularly these include the need for SUDS to be used throughout the development in order to further reduce flood risk but also provide new habitats and water conservation measures; provide additional habitats in the form of green roofs and roof gardens; the setting specific targets for water and energy conservation and to further promote the use of sustainable materials and products.

10. References

Baker Associates, Scoping Report for the SA/SEA of the Local Development Plan (LDP), prepared for Bridgend County Borough Council by Baker Associates Planning Consultants, December 2006.

Bridgend County Borough Council Local Development Plan Sustainability Appraisal Scoping Report December 2006 (advance copy).

Bridgend County Borough Council Lock's Common Local Nature Reserve Management Plan 2003-2007.

Bridgend County Borough Council Porthcawl Marina and Coast Protection Study Volume 4: Protection of Sandy Bay and the Regeneration Development Area June 2005.

Swansea Bay Coastal Engineering Group Shoreline Management Plan Sub-Cell 8b: Lavernock Point to Worm's Head Plan Document (Volume 4) March 2001.

Bridgend County Borough Council Porthcawl Development Framework SPG 2004 – CDN Planning, Alder King Property Consultants and Halcrow.

Environmental Assessment of Plans and Programmes (Wales) Regulations 2004 (S.I. 2004/1656 (W/170)) ("the Wales Regulations").

Local Development Plans Wales, Welsh Assembly Government, 2005.

Advisory

ODPM. Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents, 2005.