

CONTROL

2. INTRODUCTION

2.1 This chapter is concerned primarily with achieving Aim One - Sustainability, and Objectives 1 - 7 of the Local Plan Strategy. As explained in the introduction, sustainability is a complex issue, and a land-use plan for Worthing, in isolation, can only go so far towards tackling problems associated with it. The consequences of doing nothing about these problems will, however, have an impact on people living and working in the Borough. As a coastal town, global warming and its implications for a rise in sea levels is a direct concern. The Local Plan must address, therefore, the contribution local development decisions make to global environmental problems and resource conservation. Such action, cumulatively with other local authorities and agencies, may be significant.

2.2 This chapter addresses the following key issues relating to sustainable development:-

- energy - both conservation and renewable sources;
- carbon fixing;
- nature conservation;
- pollution;
- flooding;
- infrastructure and service provisions.

Because these topics are diverse, a Strategic Framework is included for each one.

ENERGY

2.3 A key concern of sustainability is to reduce the use of energy resources, particularly non-renewable ones, in order to minimise emissions of the greenhouse gases that contribute to global warming. The main contributor is carbon dioxide and the most significant source of this is the burning of fossil fuels such as coal and oil. Central Government urges all local authorities to play a part in this process. The Local Plan can contribute to reducing carbon dioxide emissions in two main ways:

- reducing demand by encouraging energy conservation; and
- encouraging energy production from renewable sources such as wind, wave and solar power.

Strategic Framework

2.4 Planning Policy Guidance Note 12 - Development Plans supports this approach whilst Planning Policy Guidance Note 22 - Renewable Energy gives specific guidance on planning for different types of renewable energy resources, and advises Local Authorities to consider what contribution their area might make to meeting need on a local, regional and national basis. Transport is using increasing amounts of energy and certain modes of transport make a significant contribution to the emission of greenhouses gases. Planning Policy Guidance Note 13 - Transport stresses the importance of reducing the amount of energy consumed in the transport sector and the

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importance of planning policies in achieving this. Planning Policy Guidance Note 1 : General Policy and Principles gives great emphasis to the sustainability issue.

West Sussex Structure Plan

- 2.5 Both the adopted West Sussex Structure Plan 1993 and the West Sussex Structure Plan Review contain policies on renewable energy and energy conservation. Energy conservation is addressed through policies on the location and design of development. Proposals to develop renewable sources of energy are supported provided that they do not conflict significantly with countryside or other relevant policies.

ENERGY CONSERVATION

- 2.6 The location and form of development can contribute to the reduction of greenhouse gases by influencing travel patterns and energy consumed through the use of buildings. This chapter considers the scope to reduce energy consumption through the location and pattern of development and the energy conscious design of buildings. Chapter 7 sets out the framework for reducing the need to travel and encouraging alternative forms of transport to the car.
- 2.7 The constrained nature of the Borough means that the options for locating development continue to be between sites within the existing Urban Area, and the edge of that area. In terms of energy conservation, development within the Urban Area offers the most benefit, as it is more likely to encourage a reduction in the need to travel, promote public transport and encourage the reuse of existing buildings. It also supports a sustainable development strategy by protecting resources within the countryside. For these reasons, the Borough Council will seek to encourage full and effective use of land within the existing Urban Area, through infill, redevelopment, conversions and changes of use. It will, in particular, promote development which maximises opportunities to reduce travel by car, either through creating a mix of uses within an area so that people can make one journey to visit a number of services, or by being located close to good public transport links.
- 2.8 Consideration must also be given, however, to the need to protect the best elements of the existing urban environment. If all of Worthing's development requirements were to be met within the existing Urban Area, there is no doubt that many features which contribute to Worthing's distinctive quality and character would be lost. The quality of life for residents and others would also be affected adversely. This is unacceptable. Provision is included in this Plan, therefore, for limited expansion at sites on the eastern and western edges of the Urban Area. Proposals in these locations will be required to provide for an energy efficient form of development. The particular issues of renewable energy and the need to avoid excessive lighting are addressed in Policy RES2 and RES8 and their explanatory text.
- 2.9 The Urban Area, together with land on its edge, allocated for development, constitutes the **Built-Up Area**. This is defined by the Built-Up Area Boundary on the Proposals Map. This is a very important policy tool, as the presumption is in favour of the principle of development within the Built-Up Area, but against it outside, apart from limited exceptions as set out in Policy C1. Two significant allocations on the edge of the Urban Area have not, however, been incorporated within the Boundary at this stage. These are West Durrington and land associated with the East Worthing Access Road. These areas will only be brought within the Built-Up Area if and when development has taken place.

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- 2.10 The amount of energy consumed in buildings is also considerable and can be addressed to a certain extent through local plan policies. For most new buildings, the Building Regulations cover issues such as thermal insulation and control and efficiency of lighting systems. The Local Plan can reinforce this by encouraging energy conservation in the design, siting and layout of development. For little or no extra cost, buildings can achieve modest energy savings which become significant when considered cumulatively. Encouragement should also be given to the re-cycling of building materials.
- 2.11 Careful design of buildings should aim to reduce energy consumption by using sunlight and daylight to contribute to heating and lighting and natural air flows for ventilation. This is not a new concept as historically there were few artificial alternatives available. Developers should consider issues such as building orientation, built form and internal layout, window shape, area and position and shading. Guidance is set out in the Building Research Establishment Information Papers IP4/92 "Site Layout for Sunlight and Solar Gain" and IP5/92 "Site Layout Planning for Daylight". Energy loss can be reduced by careful attention to siting and shelter by landscaping.
- 2.12 The incorporation of energy conservation measures will have to be balanced against other environmental considerations, most significantly to ensure that development has a high quality of design, and does not detract from the townscape. In some areas of Worthing, townscape and historic considerations will be important and the Borough Council will support energy conservation solutions which are not harmful to these interests. Careful consideration will also need to be given to resolving any conflict between ensuring adequate daylight and the protection of trees.

POLICY RES 1

Subject to built environment policies and other considerations, the design and layout of all developments should:-

- (i) make full and effective use of land, especially on sites which are near to good public transport links;**
- (ii) maximise opportunities for the use of daylight, sunlight and natural air flows to provide lighting, heating and ventilation to buildings;**
- (iii) reduce exposure of buildings to wind, through the retention of existing trees and other forms of screening, and the use of landscaping; and**
- (iv) incorporate or utilise re-cycled building materials wherever possible**

RENEWABLE ENERGY

- 2.13 Renewable energy is the term used for energy flows that occur naturally and repeatedly in the environment. The main sources include the sun, wind, sea and flow of water. Other sources are plant material, and combustible or digestible industrial, agricultural and domestic waste. A study carried out by the Energy Technology Support Unit on

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behalf of the Department of Trade and Industry, suggests that there are very few opportunities for commercially viable renewable energy projects in West Sussex of a scale which would contribute significantly to the National Grid. None are in Worthing. The most likely schemes to come forward in the Borough would be small scale proposals generating heat or electricity for individual domestic or commercial properties. Examples could include solar or photovoltaic panels, combined heat and power plants and possibly individual wind turbines.

- 2.14 Worthing Borough Council will support proposals which harness renewable energy resources, but this must be balanced against environmental and other constraints such as Policies C2 and C3 concerning protection of the Area of Outstanding Natural Beauty. Solar and photovoltaic panels generally have limited adverse impact, but because of their appearance are unlikely to be acceptable on listed buildings, local interest buildings and prominent frontages in Conservation Areas. With regard to wind turbines, issues such as siting, appearance, noise, safety and electro-magnetic interference will need careful consideration. Appearance and concerns regarding pollution may be issues for combined heat and power projects.

POLICY RES 2

Proposals which exploit renewable energy resources will be permitted provided that they do not have an unacceptable adverse effect upon the natural or built environment, including wildlife, or upon residential amenity.

CARBON FIXING

Strategic Framework

- 2.15 In addition to reducing emissions of carbon dioxide, measures can be taken to increase the capacity for it to be absorbed by what are known as carbon sinks. Soil represents the major carbon sink, but fixing of carbon dioxide by trees and other vegetation represents the element most amenable to man-made change. Trees lock up carbon as they grow, store it in maturity or within timber products, and finally release it when the wood rots or is burnt. The UK is committed under the Framework Convention on Climate Change to maintaining or increasing the capacity of its carbon sinks. The Structure Plan Review refers to the planting of native trees and hedges as a means of assisting carbon dioxide retention.

Retention of existing, and increase in tree and vegetation cover.

- 2.16 It would require an extensive area of new tree and vegetation planting to make even the smallest impact on carbon dioxide emissions within the Borough. This is not practicable. It is valid, however, for Local Plan policies to seek to retain as much as possible of the Borough's existing trees and vegetation and the Borough Council will expect developers to increase it wherever possible, for example through landscaping associated with development or environmental improvement schemes. Such an approach will assist in fixing carbon dioxide. There are other benefits associated with trees and vegetation, including their capacity to absorb other pollutants, their contribution to visual amenity, provision of habitats for wildlife, and their role in reducing energy consumption by providing shelter to buildings.

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- 2.17 Many of the issues relating to trees and vegetation are dealt with elsewhere in this Plan, for example in landscaping and tree policies in Chapter 5 and nature conservation policies later in this chapter. In implementing these policies, the role of trees and vegetation in fixing carbon dioxide and the need to retain existing provision and to add to it, will be taken in to consideration.

NATURE CONSERVATION

- 2.18 Nature conservation is of increasing importance both at a global and more local level. Internationally, at the Rio Earth Summit in 1992, 179 nations including the UK, signed the Biodiversity Convention. Biodiversity is essentially the variety of life on Earth and focuses on the need to retain a large "gene pool" for every species, requiring links between isolated habitats to enable species to flourish. The Convention recognises the decline in biodiversity, and the signatories pledged to reverse the trend. A national and regional context has been put in place through wildlife legislation and planning guidance. At the more local level, the West and East Sussex Biodiversity Action Plan provides a framework for implementation by a variety of groups including local authorities. Much work is currently being undertaken on a practical basis by Worthing Borough Council and local groups. It is anticipated that the Borough Council will produce its own biodiversity action plan, within the time-scale of this Local Plan.
- 2.19 The Borough's wildlife resources, both flora and fauna, form an essential part of its distinctive character, and can bring benefits for residents and visitors alike by providing a pleasant environment, together with recreational and educational resources.

Strategic Framework

- 2.20 The importance of conserving wildlife resources is reflected in the Planning and Compensation Act 1991. This places a duty on local planning authorities to include policies in their development plans to conserve the natural beauty and amenity of land. Planning Policy Guidance Note 9 - Nature Conservation, notes that the country's natural wildlife heritage is not confined to designated sites such as National Nature Reserves and Sites of Special Scientific Interest. It is also found throughout the countryside and in many urban and coastal areas. The Planning Policy Guidance also refers to the fact that urban sites often have an enhanced local importance because of their relative scarcity.
- 2.21 In addition to protecting and enhancing statutory and non-statutory sites, Local Plan policies should cover other features that provide wildlife corridors or links; the network necessary to maintain a range and diversity of flora and fauna. This can include hedgerows, ponds and small woods. Policies to encourage sensitive landscaping and planting can also add to the network.

West Sussex Structure Plan

- 2.22 Policies in the West Sussex Structure Plan 1993 and the West Sussex Structure Plan Review afford strong protection to statutory and non statutory sites of nature conservation value. The Plans also address the management, creation and improvement of wildlife habitats; including trees, woodland and hedgerows which are important to wildlife conservation.
- 2.23 West Sussex County Council has produced a "Nature Conservation Strategy for West Sussex". This sets out a framework for conservation policy and practice in the county. Much of the strategy is relevant to the role of planning and nature conservation.

Features of Nature Conservation Value

- 2.24 There is a variety of national and local designations relating to sites of nature conservation importance. Cissbury Ring is designated as a Site of Special Scientific Interest (SSSI) and as such is a site of national importance. It requires, therefore, strong protection against harmful development. In the event that development can be justified despite harm to an SSSI, the Borough Council will seek mitigation and/or compensatory measures either on site, or at an appropriate alternative location, such measures to be secured by planning conditions or legal agreement. The Borough Council will seek advice from English Nature in relation to proposals likely to affect the Cissbury Ring Site of Special Scientific Interest or any other SSSI which might be designated in the future.

POLICY RES 3

Development which would have an unacceptable adverse effect, directly or indirectly on a Site of Special Scientific Interest (SSSI) will not be permitted unless the reasons for the development clearly outweigh the nature conservation value of the site itself and the national policy to safeguard the national network of such sites.

- 2.25 West Sussex County Council, in conjunction with the District Councils, has carried out a survey to identify sites of special interest throughout the county. These are known as Sites of Nature Conservation Importance (SNCI). There are 11 such sites in Worthing, as set out in Appendix 2 and as shown on the Proposals Map. Most are within Worthing's countryside but one, at Heene Cemetery, is in the urban area; its designation recognises the rarity of urban nature conservation sites. Although not as important as the national designation of SSSI, SNCIs are valuable within the local context and require protection against harmful development. Worthing Borough Council is itself responsible for the management of a number of SNCIs and is carrying out a rolling programme of reviewing management regimes within them.
- 2.26 As explained in PPG 9, non-designated sites also form an essential part of the network which is necessary to allow flora and fauna to flourish. Particularly important are the links, such as hedgerows and streams, which allow species to move from site to site and habitats for protected species such as bats. The Borough Council will seek to resist development which would harm such features, including hedgerows, ponds and ancient or other woodland. In the event that development can be justified despite harm to a SNCI, or other site or feature of nature conservation interest, the Borough Council will seek mitigation and/or compensatory measures either on site or at an appropriate alternative location, such measures to be secured by planning conditions or legal agreement. The Borough Council will seek advice from the County Ecologist in relation to proposals likely to affect a Site of Nature Conservation Importance and other sites or features that may have significant local value.

POLICY RES 4

Development which would have an unacceptable adverse effect directly or indirectly on a Site of Nature Conservation Importance (SNCI), or other sites or features of nature conservation interest

including wildlife corridors, ponds, ancient or other woodland will not be permitted unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the substantive nature conservation value of the site.

In applying both Policy RES 3 and RES 4, greater weight will be attached to retaining a habitat if it is irreplaceable.

Protected Species

- 2.27 Certain plant and animal species are protected under the Wildlife and Countryside Act 1981, whilst other animals such as badgers are protected under their own legislation. The presence of a protected species is a material consideration in considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat. In determining any such application, the Borough Council will consult English Nature. If development can be justified despite its impact upon a species, the Borough Council will seek to use planning conditions or a legal agreement to minimise adverse effects.

POLICY RES 5

Development which would have an adverse effect on badgers, seals or species protected by Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended) will not be permitted unless;

- (i) there are reasons for the proposal which outweigh the need to protect the particular species concerned; and**
- (ii) through the use of planning conditions or a legal agreement, measures can be taken to:-**
 - (a) facilitate the survival of individual members of the species;**
 - (b) reduce disturbance to a minimum; and**
 - (c) provide adequate alternative habitats to sustain at least the current levels of population.**

Further information and advice relating to protected species can be obtained from English Nature.

- 2.28 A nation-wide survey of the near-shore sea bed and its marine life has resulted in the identification of Marine Sites of Nature Conservation Importance. One such site is the Worthing Lumps, a chalk cliff which lies 8km off Worthing's seafront. Although planning powers do not extend beyond the low water mark, the Borough Council will have regard to the effects of development which could impact on marine life.

Creation of New Sites and Features of Nature Conservation Interest

- 2.29 In addition to protecting existing resources, the Local Plan should look to create new sites and features to improve wildlife habitats throughout the Borough. The provision of features through landscaping and enhancement in association with development is considered in Chapters 3 and 5 of the Plan. There is in particular a need for sites which allow an element of public access and interpretation/ education. Legislation exists which allows local authorities to establish Local Nature Reserves. These are habitats of local significance which can make a contribution to nature conservation and the opportunity for the public to see, learn about and enjoy wildlife. The need to ensure public access requires careful consideration in selecting an appropriate site. Within the period of this Plan the Borough Council, in conjunction with English Nature and, as appropriate, private land owners, will seek to establish a Local Nature Reserve within Worthing Borough.
- 2.30 An opportunity may exist to create one new site for nature conservation purposes within the Borough. The proposed East Worthing Access Road has led Worthing Borough and Adur District Councils jointly to consider the future of land on either side of the approved route. One particular area already has some nature conservation interest as relatively unimproved grassland, with a network of small hedgerows and some wetland habitat. It is proposed that all or part of this area should be retained and enhanced for nature conservation purpose. Further consideration is required in relation to a number of issues, including the precise boundaries of the site - in particular whether land to be cut off on the west side of the East Worthing Access Road should be included, a detailed study of species present, enhancement measures, the potential for an element of public access and interpretation, and other related management issues. The site lies largely within Adur District and is referred to in the Adopted Adur Local Plan. An area of about 1.5 hectares is, however, within the Worthing Borough boundary. The Local Authorities will continue to work together on detailed issues relating to this site.

POLICY RES 6

Land adjoining the proposed East Worthing Access Road, as shown on the proposals map, is allocated for nature conservation purposes.

POLLUTION AND FLOODING

- 2.31 Air, water and land are key natural resources which are available within the Borough. The effects of development on the quantity of land available for various land uses are discussed elsewhere in this Chapter and in Chapter 3. The main threats to the quality of these resources come from pollution and flooding.

Pollution, including air quality

- 2.32 Pollution is the unwanted secondary effects of a development or use of land, namely the waste substances, in terms of their impact on human health and amenity, and on the natural resources of land, air and water. Pollution can be in the form of noise, fumes, chemicals, odour, vibration, heat, dust, and lighting and can arise from a variety of sources. It can include some industrial activities, agriculture, traffic and construction work. It can also be present in contaminated land. Transport is a major cause of pollution at both the local and global level. The need to reduce the polluting effects of transport is discussed earlier in this Chapter and in the Transport Chapter.

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- 2.33 Planning Policy Guidance Note 23 -Planning and Pollution Control, indicates that Local Plans should seek to accommodate the needs of industries and utilities which may present the risk of pollution whilst protecting local environmental assets and amenity. Key issues include the provision of sites for, or criteria against which to assess, potential polluting land uses, the separation of such uses from other development in order to reduce conflict, the environmental consequences of and planning policy for contaminated land, and restoration measures and pollution control to ensure that land occupied by polluting uses is capable of after-use.
- 2.34 Planning Policy Guidance Note 24 - Planning and Noise advises that Local Plans should include policies designed to keep noise generating and noise sensitive development apart, as far as is practicable. Noise generating uses should be guided as far as possible to sites where they will have less impact or where mitigation measures can minimise that impact. Noise sensitive developments are defined as housing, schools and hospitals, but may include other uses.
- 2.35 The Environment Act 1995 imposes a duty on Local Authorities to identify and take action to tackle any local air quality problems arising from seven key pollutants; ensuring that by 2005 air pollutant concentrations in their area comply with health based targets. Key sources of many of the pollutants are motor vehicle emissions and industrial processes. Land use planning will, therefore, be a key element of any strategy to improve local air quality.

West Sussex Structure Plan

- 2.36 Both the West Sussex Structure Plan 1993 and the West Sussex Structure Plan Review seek to protect the environment by resisting development which will cause unacceptable pollution.

Issues in Worthing

- 2.37 Paragraph 2.35 refers to requirements in relation to local air quality management. The Borough Council's Environmental Health Group carried out a first round three-stage review and assessment of air quality, which indicates that the Borough will comply with the national air quality objectives. Formal Air Quality Management Areas will not be necessary, therefore, in Worthing at present. Nevertheless, the Stage 2/3 Review and Assessment Report concluded that there was an ongoing need for more research, data collection and monitoring to further refine the predictions that need to be made about future air quality. The Report also contains a commitment to prepare an Air Quality Strategy for Worthing to ensure that stakeholders continue to consider, monitor and improve local air quality. The Review and Assessment process is ongoing, with the next round due to be completed before the end of 2003
- 2.38 A major source of many air-based pollutants is motor vehicle emissions. The Development Plan has a key role to play, therefore, in guiding the location of development, reducing the need to travel and promoting transport choices. This Local Plan includes strategies and policies to achieve these measures. Policy RES 7 is intended to address problems of air pollutants arising from other sources such as industrial processes.
- 2.39 Other issues of relevance to Worthing include the need to reduce pollution to seawater, surface water and the groundwater aquifer. The Borough Council is one of several

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bodies involved in controlling pollution. The Environment Agency plays a key role, whilst statutory undertakers such as Southern Water Services Limited have a remit concerning improvements in the quality of seawater along this part of the coast. The planning system should not duplicate the powers of these agencies but can complement them.

Polluting Development

- 2.40 The key issue in relation to potential pollution generating activities, whether through noise, dust, fumes, chemicals or other means, is to ensure that it is only permitted where its effects on the natural or built environment, including land, air and water, and on the amenity of residents are of an acceptable level. In carrying out its planning function, the Borough Council will seek to ensure that development proposals do not lead to breaches of national pollution standards. This may mean that certain types of development will not be acceptable in principle. There is not scope, however, to resist all pollution generating development. Such uses often contribute to the local economy, providing jobs. They should be directed, however, to those locations where their impact is minimal, either with or without appropriate mitigation measures. With regard to industrial processes, in a Borough such as Worthing, the only acceptable location for polluting activities is likely to be existing Industrial Estates. Even here, very careful consideration must be given to the effect on existing businesses in the area; certain light industrial processes may be sensitive to forms of pollution.
- 2.41 Other types of noise, litter and odour generating activities, such as hot food take-always, public houses and night clubs, together with other commercial businesses, are likely to wish to locate in a wide variety of areas including the Town Centre, other shopping centres and established residential areas. The acceptability of such proposals must be carefully considered in each individual case against accepted criteria.
- 2.42 The Borough Council will take the opportunity, when it arises through development proposals, to seek a reduction in actual, or the potential for, pollution generated by existing land uses.
- 2.43 Certain types of land use are particularly sensitive to the effects of pollution such as noise. Examples include housing, schools and hospitals. The Borough Council will seek as far as practicable to protect such uses from pollution generating activities. In order, however, not to place unacceptable requirements for mitigating measures on existing or potential polluting activities, the Borough Council will also resist the location of pollution sensitive development close to sources of pollution. An exception may be made where acceptable mitigation measures, such as the use of double glazing, can be incorporated into the noise sensitive development.

POLICY RES 7

Development, including the intensification of existing uses, which generates or has the potential to generate pollution, will only be permitted where by virtue of its location and/or appropriate mitigation measures, its impact on the natural and built environment, including wildlife and the amenities of local residents, does not cause unacceptable harm.

Development which is incompatible alongside pollution generating activities will not be permitted near to such uses where it is likely to

result in the need for additional mitigating measures to control the pollution generating activity.

In the context of this policy, pollutants include noise, fumes, chemicals, odour, vibration, heat and dust.

- 2.44 Where a proposal is likely to result in significant levels of pollution, the applicant may be requested to submit a statement detailing the form and level of pollution likely to be generated, and the measures proposed to control the pollutants. Before planning permission is granted, the Borough Council will seek to ensure that any necessary mitigation measures can be adequately accommodated on the site. Conditions limiting the operating hours of certain uses, such as industry and take-aways, will be used where this would be effective in minimising the impact on adjacent occupiers, particularly residents. In cases where a development involves substantial construction or demolition work in a residential area, the Borough Council will require a scheme for dust suppression.

Lighting

- 2.45 In recent years, there has been increased use of lighting, for example in relation to roads, advertisements, and to allow night time use of commercial and recreation facilities. Lighting is important for public safety, and can be effective as a crime prevention measure, although excessive lighting would be counterproductive if it resulted in blinding and facilitated a crime. Excessive lighting can also cause nuisance and unnecessary glow, impeding views of the night sky and as such is a form of visual pollution. In addition, lighting that does not shine on its intended target or that which is excessively bright wastes energy and can have a detrimental impact on the amenity of neighbouring premises. Not all forms of external lighting require planning permission. In those cases where it has control, however, Worthing Borough Council will seek to limit the amount of lighting to the minimum necessary to achieve its purpose and ensure that illumination is effective. The Council will require developers to demonstrate that this approach has been followed, including by reference to appropriate standards or guidance, eg. British Standards, Institutions of Lighting Engineers Guidance or CIBSE Lighting Guides. Conditions will be used as appropriate to control these issues together with hours of operation.

POLICY RES 8

Proposals that include the provision of external lighting will be permitted provided that:-

- (i) the amount and intensity of lighting does not exceed that necessary to achieve its purpose; and**
- (ii) the spread of light is restricted to the area for which lighting is required; and**
- (iii) there would not be a significant adverse impact upon the character of the area or amenity of residents, following compliance with any conditions deemed necessary on hours of operation and/or intensity of illumination.**

Contaminated land

- 2.46 A policy of making the maximum appropriate use of land within the existing urban area requires that, where possible, contaminated land should be recycled and brought into productive use. This can also have the benefit of providing an opportunity to address any threats posed by a site to health or the environment.
Types of land likely to be contaminated include old gas works, land used for industrial processes involving hazardous substances, landfill sites and sewage works. In Worthing, land at Decoy Farm and Dale Road is former landfill and is consequently subject to contamination. A number of other sites promoted for development in this Plan are also likely to be contaminated to an extent by virtue of their former use. These include the British Gas site at Park Road and the waste water and gas sites at West Worthing. Other sites may exist.
- 2.47 In considering the development of land known, or thought likely to be contaminated, the principle is one of ensuring the land is "suitable for use". This requires that the owner, occupier or developer of a site should undertake those measures necessary to deal with any unacceptable risks to health or the environment, taking in to account the use intended for the land. This does not of course preclude the owner, occupier or developer from doing more if they so wish. Paragraph 2.46 sets out the types of land likely to be affected by contamination. It is for the owner or developer to determine the existence and extent of any contamination. The Borough Council will follow the guidance set out in PPG 23 with regard to the need for pre application investigation into contamination issues. Such investigation will be required if a site is known or strongly suspected to be significantly contaminated, but if there is only some suspicion or contamination is slight, planning permission may be granted subject to conditions requiring site investigation and any necessary remedial measures. The need for and type of remedial measures are likely to vary from site to site.

POLICY RES 9

Where an application for development is submitted for a site with known or suspected contamination, the applicant will be required to carry out investigations and remedial measures sufficient to ensure that any unacceptable risk to health is removed prior to development proceeding.

- 2.48 Guidance for local authorities to determine whether land should be classed as contaminated under the Environment Act 1995 has been published by the Government. In accordance with Regulations which came into effect in April 2000, the Borough Council has prepared a Contaminated Land Inspection Strategy.

Protection of Water Resources

- 2.49 Water is an essential resource. Growing demand for supplies coupled with problems of drought in recent years makes it particularly important that existing resources are protected. Water for Worthing is sourced mainly from groundwater sources in the form of underground chalk aquifers. The northern part of the Borough in particular has several public water supply boreholes. Surface water resources such as coastal water, streams and ponds are also important, in providing a wide range of uses and habitats. Damage to such water resources can occur from physical disturbance and pollution. The safeguarding of these resources from development likely to cause such problems is

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particularly important and relies heavily on the planning system. Once damage has been caused, the water resource can be lost for many years. It is preferable, therefore, to prevent or reduce the risk of harm rather than deal with its consequences. This may require the use of planning conditions to ensure adequate measure to protect water resources or in certain cases refusal of planning permission. In operating this approach Worthing Borough Council will consult with the Environment Agency and have regard to the Environment Agency's guidance note "Policy and Practice for the Protection of Groundwater".

POLICY RES 10

Development will not be permitted which would lead to an unacceptable risk of deterioration in the quality or potential yield of surface and groundwater resources.

Areas at risk from flooding and surface water run off

- 2.50 The risk of flooding must be taken into account in considering development proposals because of the potential impact on people and property. In Worthing, potential problems of flooding may arise from the sea and from watercourses inland. Issues and policies associated with tidal flooding are set out in Chapter 4. This Section deals with the need for development to address problems associated with existing watercourses and surface water run off.

Strategic Framework

- 2.51 Planning Policy Guidance Note 12 - Development Plans advises that local plan policies should reflect flood defence and land drainage issues. Further guidance on the protection of the floodplain is contained in PPG25 (issued July 2001) entitled "Development and Flood Risk". The West Sussex Structure Plan seeks to resist new development which would cause or increase danger from flooding.
- 2.52 The Environment Agency plays a major role in relation to flood defences and land drainage, the latter in conjunction with Worthing Borough Council. The Agency's approach to protecting water resources and reducing flood risk in the Worthing area is set out in the Arun and Western Streams Local Environment Agency Plan. The Borough Council will consult with the Environment Agency on development proposals, where appropriate, to seek its advice in assessing flood risk and the potential impact on the water environment associated with a proposal
- 2.53 Certain areas of Worthing, most particularly those proposed for development at West Durrington and parts of East Worthing within and outside the Built Up Area Boundary contain systems of watercourses and ponds which have an important function in draining the land. It is essential that any development in such areas should take account of this watercourse system. In particular, proposals should be designed to ensure that water flows are not diverted or added to in a way that causes flooding either within the site or elsewhere. Development should also ensure that, where necessary, access to watercourses for maintenance purposes can be retained. The role of such water features in providing habitats of nature conservation value is addressed earlier in this chapter.
- 2.54 New developments may result in a substantial increase in surface water run-off as permeable surfaces are replaced by impermeable surfaces such as roofs and paving.

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This can result in increased risk of flooding within the development site itself and within the wider surrounding area. Such run off can also present problems from pollution, physical damage to watercourse habitats, and silt deposition. These effects can be at a considerable distance from the development.

- 2.55 New development will only be permitted where the Borough Council is satisfied that suitable measures, designed to mitigate the adverse impact of surface water run-off, are included as an integral part of the development. This may mean that in certain cases, developers will need to submit an assessment of the surface water drainage impacts of proposed development as part of the planning application.

POLICY RES 11

Development, including intensification will only be permitted, where either with or without mitigation measures, it will not:-

- (i) increase the risk of flooding beyond acceptable levels; and**
- (ii) have an unacceptable adverse effect upon the water environment as a result of impact upon existing watercourses and their floodplains or increased surface water run-off.**

INFRASTRUCTURE AND SERVICE PROVISION

- 2.56 Policies elsewhere in this Plan seek to promote development of specific sites for housing, commercial and retail schemes, in order to provide for the social and economic needs of the community. It is important, however, that new development does not take place without the necessary supporting infrastructure and services either already being in place or being provided in conjunction with it. The adequacy of infrastructure and services can be a material consideration in deciding whether permission should be granted. This is reflected in PPG 12 – Development Plans. The following are examples of infrastructure and services in this context:-

County Council	District Councils	Other
Education	Affordable housing	Land drainage
Highways and transport, including cycling and public transport	Community buildings and facilities	Water supplies
Libraries	Leisure facilities	Sewage disposal
Fire and rescue including fire hydrants	Public open space including play space	Health care
Social care	Refuse and recycling collection points and local recycling facilities	
Civic amenity sites		

- 2.57 In cases where the necessary infrastructure or services associated with a new development are not available, planning permission will not normally be granted. If, however, the infrastructure or services are planned or can be made available within an appropriate timescale, permission may be granted subject to a condition requiring development to be phased in line with infrastructure or service provision. This is to

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ensure that development does not take place in advance of the necessary infrastructure or service becoming available. An appropriate contribution towards the infrastructure or service required by a development will be sought where necessary. This may be through the direct provision of facilities/services or an appropriate financial contribution to the authority or organisation responsible. Provision of this contribution will be secured by legal agreement. Detailed advice relating to West Sussex Planning Authorities' overall policy approach regarding provision of infrastructure and services, including financial contributions and use of planning conditions and obligations, is set out in Supplementary Planning Guidance – "The provision of service infrastructure related to new development in West Sussex – Parts 1 and 2".

- 2.58 Policies elsewhere in this Plan which allocate land for major development generally include reference to specific infrastructure and service requirements. There are also policies which deal with certain types of infrastructure and services such as children's play space, public transport and affordable housing.

POLICY RES 12

Development will not be permitted unless the infrastructure or services made necessary by the development are available or will be provided before new development places unacceptable demands on existing infrastructure or services.

In cases where necessary infrastructure or services are planned or can be made available within an acceptable timescale, planning consent may be granted for development subject to a condition or legal agreement requiring that it be phased in line with that infrastructure or service provision.

An appropriate contribution towards the provision of infrastructure or services directly related to a development proposal will be sought where necessary.

ENVIRONMENTAL IMPACT ASSESSMENT

- 2.59 European Council Directive No. 85/337/EEC seeks to ensure that when determining applications for development the relevant authority makes its decision in the knowledge of any likely significant effects on the environment. The Directive, therefore, sets out a procedure that must be followed for certain types of project before consent can be given. This procedure of Environmental Impact Assessment (EIA) is a means of drawing together in a systematic way an assessment of a project's likely significant environmental effects. The Town and Country (Environmental Impact Assessment) (England and Wales) Regulations 1999 establishes those projects for which EIA is always required (Schedule 1) and may be required (Schedule 2). Further advice on Environmental Impact Assessment can be obtained from the Borough Council's Planning Division.

