

12.0 ENVIRONMENT

Objectives

- To minimise and mitigate the environmental impacts of development

12.1 With increasing and often conflicting demands being placed on the environment, it is now widely accepted that a sustainable approach to growth and development is required if these demands are to be balanced with the need to protect and enhance the environment for now and the future. The Environment Agency and the City Council have direct control, through their regulatory and operational activities, over some of the factors that have an impact on the well being of the environment. The planning system also has a key role to play. The City Council will continue to work closely with the Environment Agency.

Pollution

12.2 Pollution may be caused by the release of substances into the air, ground or water or through noise, dust, smoke, fumes, gas, steam, heat or radiation. Uses with the potential to cause pollution must be properly sited and controlled and uses which may be affected by pollution must be kept away from the sources of pollution or protected by other means.

Hazardous Installations

12.3 A gas turbine power station has been built at Marsh Green Road, Marsh Barton, following advice that it would not cause a risk to public health or safety. The Council intends to ensure that new permissions involving hazardous substances are not permitted where there would be a risk to people occupying development nearby and that new development is not permitted near to premises handling hazardous substances, nor to buried pipelines carrying hazardous substances, if the occupiers of the development would be put at risk. The most acceptable location for installations handling hazardous substances is on the industrial estates.

EN1: DEVELOPMENT THAT MAY BE LIABLE TO CAUSE POLLUTION, INCLUDING PROPOSALS WHICH ALLOW THE USE, MOVEMENT OR STORAGE OF HAZARDOUS SUBSTANCES, WILL ONLY BE PERMITTED IF:

- (a) **THE HEALTH, SAFETY AND AMENITY OF USERS OF THE SITE OR SURROUNDING LAND ARE NOT PUT AT RISK; AND**
- (b) **THE QUALITY AND ENJOYMENT OF THE ENVIRONMENT WOULD NOT BE DAMAGED OR PUT AT RISK. DEVELOPMENT ON OR IN THE VICINITY OF THE SITE THAT MAY BE LIABLE TO CAUSE POLLUTION WILL ONLY BE PERMITTED IF THERE IS NO UNACCEPTABLE RISK TO THE HEALTH AND SAFETY OF ITS USERS.**

Contaminated Land

12.4 The Government (Planning Policy Guidance Note 23: Planning and Pollution Control) advises that, if practicable, contaminated land should be recycled in order to reduce demand for the development of greenfield sites and also reduce the threat posed by contamination to health, safety or the environment. Very few sites are so badly contaminated that they cannot be re-used. In particular instances, the range of possible developments on the site may be limited because of the type of contamination that exists, for example, employment use may be possible on sites where new housing would be unacceptable. The preferred approach is that contamination should be dealt with on the site itself.

12.5 Where the site is known to be, or suspected of being, contaminated, developers must carry out suitable investigations to assess the nature and extent of contamination. Appropriate, sustainable and cost effective means of remediation should be included as part of the planning application. PPG 23 states that, although it would be preferable for the planning authority to be aware of any contamination constraints that may apply to the Local Plan allocated sites, the responsibility of assessing whether a site is contaminated rests with the site owner.

12.6 Where necessary, planning permission will include appropriate site investigation and remediation conditions. Risks must be assessed, and remediation requirements set, on the basis of both the current use and the circumstances of the land and its proposed new use. Requirements for remediation, as part of a planning permission, will be limited to the work necessary to enable the specific future use of the land for which permission is being sought and will not be based on any potential future use. The remediation measures must be completed before the development is occupied. The developer must submit a remediation statement detailing what contamination has been found and how it has been dealt with together with confirmation that the site is in such condition as to be suitable for the proposed use. The Council's Contaminated Land Strategy, developed in accordance with the Environment Protection Act – Part IIA, sets out further guidance.

EN2: WHERE DEVELOPMENT IS PROPOSED ON OR NEAR A SITE WHERE THERE IS CONTAMINATION OR GOOD REASON TO BELIEVE THAT CONTAMINATION MAY EXIST, THE DEVELOPER SHOULD CARRY OUT A SITE ASSESSMENT TO ESTABLISH THE NATURE AND EXTENT OF THE CONTAMINATION. DEVELOPMENT WILL NOT BE PERMITTED UNLESS, IN RELATION TO THE SPECIFIC USE FOR WHICH PERMISSION IS BEING SOUGHT, PRACTICABLE AND EFFECTIVE MEASURES ARE TO BE TAKEN TO PREVENT UNACCEPTABLE RISKS TO HUMAN HEALTH OR THE ENVIRONMENT. REMEDIATION MEASURES MUST ENSURE THAT THE PROPOSAL WILL NOT:

- (a) EXPOSE THE OCCUPIERS OF THE DEVELOPMENT AND NEIGHBOURING LAND USES TO UNACCEPTABLE RISK;**

- (b) THREATEN THE STRUCTURAL INTEGRITY OF ANY BUILDING BUILT, OR TO BE BUILT, ON OR ADJOINING THE SITE;
- (c) LEAD TO THE CONTAMINATION OF ANY WATERCOURSE, WATER BODY OR AQUIFER;
- (d) CAUSE THE CONTAMINATION OF ADJOINING LAND OR ALLOW SUCH CONTAMINATION TO CONTINUE.

CONTAMINATION SHOULD BE TREATED ON SITE IF POSSIBLE. ANY PERMISSION FOR DEVELOPMENT WILL REQUIRE THAT THE REMEDIAL MEASURES AGREED WITH THE AUTHORITY MUST BE COMPLETED BEFORE THE DEVELOPMENT IS OCCUPIED.

Air and Water Quality

12.7 Good air quality is important for sustaining human health. It is also an indicator of broader environmental quality. Poor air quality can directly damage flora, fauna and buildings and have significant adverse effects on soil and water. Emissions from industry and road transport, in particular, are major causes of pollution. Government guidance on the linkages between air quality considerations and the planning process are set out in the DETR report 'Air Quality and Land Use Planning'. This draws attention to guidance on air quality in PPG's 4, 6, 13 and 23.

12.8 The Council is required, under Section 82 of the Environment Act 1995, to undertake a review and assessment of air quality in the City, within the context of national air quality objectives, and to prepare a local air quality strategy. The Council will ensure that the proposals in this Local Plan are closely linked to, and complementary with, the air quality strategy.

12.9 In particular, the Plan aims to ensure that:

- (i) the siting of industrial development will not cause pollution or harm;
- (ii) there is no increase in the potential for harm by the location of residential or other sensitive developments in areas where they are likely to be affected by environmental pollution;
- (iii) all development takes air quality considerations fully into account;
- (iv) transport measures are introduced which reduce reliance on the private car.

12.10 Water is an essential resource, the pollution of which can have a serious effect on drinking water supply, and on industrial and agricultural practices. The general amenity, water based recreation and conservation value of areas is also reduced by water pollution. There are a number of potential sources of water pollution, including:

Design Guidance

- inadequately treated effluent from sewage/waste treatment works, trade premises, industrial processes, mineral extraction;
- inadequate foul or surface water drainage provision;
- inappropriate and/or uncontrolled redevelopment of contaminated land;
- inappropriate storage of materials, particularly oils and chemicals;
- agricultural activities;
- uncontrolled contaminated surface water run-off from industrial, housing or road development.

12.11 Areas where contamination of surface water or groundwater is possible, should be bunded or otherwise isolated from general drainage. Provision for drainage from these areas should be subject to an appropriate control measure such as a well maintained oil-trap.

12.12 The Environment Agency and South West Water favour the use of separated systems for foul and surface water drainage as this prevents the overloading of sewerage works with surface water during storm events. The overloading of sewerage works caused by combined foul and surface water sewers is a source of river pollution and an important limit to improving river quality. New development should include separated systems as a matter of course, including consideration of additional works elsewhere in the sewerage catchment area to generate sufficient foul sewerage capacity at sewerage works where such capacity is a limiting factor on development.

EN3: DEVELOPMENT THAT WOULD HARM AIR OR WATER QUALITY WILL NOT BE PERMITTED UNLESS MITIGATION MEASURES ARE POSSIBLE AND ARE INCORPORATED AS PART OF THE PROPOSAL.

Flood Risk

12.13 Flood plains are areas of land alongside watercourses over which water flows in times of flood, or would flow but for the presence of defences. Flood plains perform the essential function of storing water during flood events. Extensive flood defence works have been carried out in Exeter. The '1999 Indicative Floodplain Maps' published by the Environment Agency, can be inspected at the City Council's Planning Services, Civic Centre.

12.14 The effectiveness of rivers and flood plains to convey and store flood water, and minimise flood risk, can be adversely affected by human activity especially by development which physically changes the flood plain. As well as increasing the risk of flooding and impeding works to reduce flood risk, this can destroy the ecological and archaeological value of the land and break-up linear habitats such as river corridors.

12.15 The Government (Planning Policy Guidance Note 25: Development and Flood Risk) advises that planning decisions should apply the precautionary principle to the issue of flood risk, avoiding such risk where possible and managing it

elsewhere. In exercising control over development and providing guidance on the growth of the City, the Council, therefore, aims to ensure:

- (i) that the effectiveness of flood plains is not impaired by development;
- (ii) that development and its occupiers are not at risk from flooding;
- (iii) that additional surface water run-off from new developments does not exceed the capacity of water courses and flood plains downstream.

12.16 Where development is proposed on a site suspected of being at risk from flooding, or where development may increase the risk of flooding elsewhere but adequate flood risk information is unavailable, the developers should carry out an assessment of flood-risk and the run-off implications of their proposals that is appropriate to the scale and nature of the development and the risks involved. Such assessments may require detailed hydrological investigation to determine the risk in order to inform the process of detailed design, the selection of mitigation measures and the overall assessment of the viability of the project in the light of the risk assessment. Where there is overriding justification for development in a flood plain, adequate flood protection and mitigation measures, which may include raising property floor levels above an appropriate flood level, must be funded and built by the developer.

12.17 Development of greenfield sites usually results in an increase in the amount of impermeable land. This can alter the natural water cycle as rates and volumes of surface water reaching a watercourse generally increase. Surface water from impermeable areas is generally conveyed by drains and sewers directly or via a sewerage system to a watercourse.

12.18 Such arrangements not only reduce the natural recharge of ground water, which wastes a valuable resource and increases pollution risk but can also increase river flows. Increased river flows can cause physical damage to the banks and bed of the watercourse and increase the risk of flooding. A reduction in groundwater recharge from such developments can also reduce local water tables that may be important for sustaining local landscape and wildlife resources such as ponds, streams, trees and wetland vegetation.

12.19 PPG25 recommends the use of Sustainable Urban Drainage Systems (SUDS) to control surface water run-off as close to its origin as possible, before it enters a watercourse. This involves moving away from traditional piped drainage systems to those which mimic natural drainage processes. The core of the SUDS approach involves reducing the quantity of run-off from a site; slowing the velocity of run-off settlement; filtering and infiltration through the use of engineering structures such as swales, detention ponds, infiltration basins, soakaways and porous surfaces; and providing passive treatment such as reed beds to collected surface water before discharge into land or a watercourse. The benefits are reduced implementation costs, reduced overall flood risks and better control of pollution from urban run-off.

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12.20 The integration of SUDS into the overall site concept and layout should be considered early in the planning and design stage, in consultation with the Environment Agency, the City Council and the Devon County Highways Authority. Where risks are identified, appropriate flow attenuation facilities or mitigation measures and their ongoing maintenance may be a prerequisite for development.

EN4: DEVELOPMENT WILL NOT BE PERMITTED IF:

- (a) IT WOULD INCREASE THE LIKELIHOOD OF FLOODING
 - (i) BY REDUCING THE CAPACITY OF, OR INCREASING FLOWS WITHIN, A FLOOD PLAIN, OR
 - (ii) THROUGH THE DISCHARGE OF ADDITIONAL SURFACE WATER, OR
 - (iii) BY HARMING FLOOD DEFENCES;
- (b) IT WOULD BE AT RISK ITSELF FROM FLOODING;
- (c) IT WOULD REQUIRE ADDITIONAL PUBLIC FINANCE FOR FLOOD DEFENCE WORKS;
- (d) ADEQUATE PROVISION IS NOT MADE FOR ACCESS TO WATERCOURSES FOR MAINTENANCE;
- (e) IT WOULD THREATEN FEATURES OF LANDSCAPE OR WILDLIFE IMPORTANCE BY REDUCING THE RECHARGE OF LOCAL WATER TABLES.

Noise

12.21 Noise can have a significant affect upon the environment and on quality of life. To ensure that the users and occupiers of land and premises are not disturbed by noise which is a nuisance or danger to health, the Government (Planning Policy Guidance Note 24: Planning and Noise) advises that noise sensitive developments should be located away from existing or planned sources of significant noise and that potentially noisy developments should be located in areas where noise would not be such an important consideration or where its impact can be minimised.

12.22 The allocations of land in this Local Plan are based, wherever practicable, on keeping noise-sensitive developments, such as housing, hospitals and schools, separated from major sources of noise, such as road and rail transport and some industrial development. If noise is likely to be an issue developers will be required to carry out an acoustic survey.

EN5: NOISE-GENERATING DEVELOPMENT WILL NOT BE PERMITTED IF IT WOULD BE LIABLE TO INCREASE ADVERSELY THE NOISE

EXPERIENCED BY THE USERS OF EXISTING OR PROPOSED NOISE-SENSITIVE DEVELOPMENT NEARBY.

NOISE-SENSITIVE DEVELOPMENT WILL NOT BE PERMITTED IF ITS USERS WOULD BE AFFECTED BY NOISE FROM EXISTING OR PROPOSED NOISE-GENERATING USES UNLESS ADEQUATE MITIGATION WORKS CAN BE IMPLEMENTED TO ACHIEVE AN ACCEPTABLE ENVIRONMENT.

Renewable Energy

12.23 Renewable energy sources, such as wind power or solar energy, offer the hope of increasing diversity and security of supply and of reducing harmful emissions to the environment from non-renewable sources.

12.24 The Government (Planning Policy Guidance Note 22: Renewable Energy) advises that its policies for developing renewable energy sources must be weighed carefully with its continuing commitment to policies for protecting the environment. The potential impact of a proposal on the local environment will, therefore, be balanced against the opportunity to reduce emissions of greenhouse gases and improve air quality.

EN6: PROPOSALS FOR THE DEVELOPMENT OF RENEWABLE ENERGY FACILITIES WILL BE PERMITTED PROVIDED THAT THE RENEWABLE ENERGY BENEFITS OUTWEIGH ANY HARM TO THE LANDSCAPE, EITHER VISUALLY OR AUDIBLY, OR TO AIR QUALITY, NATURE CONSERVATION INTERESTS, WATER RESOURCES, AGRICULTURAL LAND (DEFINED AS GRADE I, II OR IIIa) OR SITES OF ARCHAEOLOGICAL OR HISTORIC IMPORTANCE.

Telecommunications

12.25 Telecommunications can play an important part in supporting a sustainable development strategy. The increasingly wide and diverse use of telecommunications encourages working from home, the dissemination of information to business and reduced travel needs. It also offers new choices in education, entertainment, shopping and banking. The Government (Planning Policy Guidance Note 8: Telecommunications) wishes to facilitate the use of the latest technological developments to ensure that people have more choice as to who provides their telecommunications services and a wider range of services from which to choose. Government guidance on telecommunications policy and procedures is also provided in Circular 04/99 'Planning for Telecommunications' and the Code of Best Practice for Telecommunications Prior Approval Procedures.

12.26 The benefits arising from increased use of the various telecommunications media must, however, be balanced against the impact of new apparatus on urban and rural surroundings and people's residential amenity. The Government advise that health effects should not be a matter of concern if the proposed development meets

international guidelines (the ICNIRP guidelines). Concern, therefore, largely focuses on the construction of masts or antennae which require elevated positions or are of a height greater than that of surrounding structures. In order to ensure that the impact of new apparatus is kept within reasonable bounds, it is essential that the minimum practicable amount is erected allowing for estimated growth in demand, and the use of existing buildings or masts for locating new antennae should be achieved wherever possible. Operators should seek to refine their technology to achieve smaller antennae equipment, particularly for use in sensitive locations such as Conservation Areas. In cases where a new mast is unavoidable, the use of appropriate existing sites where a mast is already present or the provision of a new mast in co-operation with other operators should be fully investigated.

12.27 Prior to identifying specific sites for new apparatus, telecommunications operators are encouraged to discuss their requirements with the Council to allow information to be exchanged and opportunities to be identified. In considering planning applications or prior approval determinations, the Council will take fully into account the special needs and technical problems of telecommunications development and the significance of the proposals as part of a national network. However, operators will need to demonstrate that they have selected the site following a comparison of alternatives, based on technical suitability, availability and visual impact, and any applications for a new mast should be accompanied by evidence that the operator has carefully considered the use of existing masts, buildings or other structures.

12.28 Small telecommunications apparatus may not have a material effect on the external appearance of the building on which they may be installed, and so do not require planning permission. Similarly much minor telecommunication development is permitted under the Town and Country Planning (General Permitted Development) Order 1995, although an application for prior approval of the siting and appearance may be required. Permitted development rights would only be withdrawn if the proposal is likely to seriously threaten amenity but the Council may seek the re-siting of an antenna if, taking into account technical and safety requirements, it has not been sited so as to minimise its effect on the external appearance of the building on which it is installed. All telecommunications development is subject to the normal statutory procedures and local plan policy guidance with regard to listed building consent (see Policy C2), the excavation of trenches for cabling which may have archaeological implications in the Area of Archaeological Importance (see Policy 5, and the impact on trees (see 13.11–13.13).

EN7: THE DEVELOPMENT OF TELECOMMUNICATIONS EQUIPMENT WILL BE PERMITTED, PROVIDED THAT:

- (a) THE SITING AND DESIGN OF APPARATUS AND ANTENNAE WILL MINIMISE THEIR VISUAL IMPACT AND THEIR IMPACT ON AMENITY; AND**
- (b) THERE ARE NO PRACTICABLE ALTERNATIVES SUCH AS RE-SITING OR MAST SHARING.**