

**Supplementary Planning Guidance**

# **Sustainable Development**

**DRAFT FOR CONSULTATION NOVEMBER 2003**

## **Information**

This draft Supplementary Planning Guidance (SPG) is available to view on the Council's web-site at: [www.wakefield.gov.uk](http://www.wakefield.gov.uk).

Copies are also available for inspection at the Council's Offices at:  
Housing & Regeneration Services, Newton Bar, Wakefield.  
Castleford Civic Centre, Ferrybridge Road, Castleford  
Normanton Town Hall, High Street, Normanton  
Wakefield County Hall, Wood Street, Wakefield

and at the Council's Libraries at:  
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Copies are also available free of charge from:  
Wakefield Metropolitan District Council  
Housing & Regeneration Services  
PO Box 92  
Newton Bar  
Wakefield  
WF1 1XS  
Tel: (01924) 306495  
Fax: (01924) 306660  
Minicom: (01924) 306600

Comments on the draft SPG should be sent on the form provided to the above address or by e-mail to: [stratpoludp@wakefield.gov.uk](mailto:stratpoludp@wakefield.gov.uk) by 18<sup>th</sup> December 2003.

For further information about the SPG contact Spatial Policy Group, telephone: (01924) 306641.

**An extract or summary of the document can be made available in large print, Braille on audio tape or in ethnic minority community languages on request. Contact (01924) 306616 / 306614 for further details.**

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# DRAFT SUSTAINABLE DEVELOPMENT GUIDE

## 1.0 INTRODUCTION

The UDP First Alteration states in paragraph 5.6.46 “It is proposed that a Sustainable Development Guide should be prepared to provide Supplementary Planning Guidance to developers”.

This guide is intended for use by developers, designers and development control officers. It sets out the principles of sustainable development and how these can be applied in practice to the development process. The guidance will be generally applicable to all types of development. It expands upon WMDC’s Sustainability Checklist (published in 2002).

The guide will be adopted as Supplementary Planning Guidance and will form a supplement to the UDP First Alteration. It will not form part of the Plan but will be a material consideration in the determination of planning applications.

The guide will make reference to regional guidance, UDP policies, the Community Strategy, and other related strategies and guidance such as the forthcoming Sustainable Drainage Guide.

## 2.0 PLANNING POLICY ON SUSTAINABLE DEVELOPMENT

In its report ‘Sustainable Settlements and Shelter: the UK National Report’ (1996) the Government set out its aims for sustainable development. A further report, ‘A Better Quality of Life’ (1999) revised the strategy and placed greater emphasis on the social dimension of sustainability. In terms of land use all Planning Policy Guidance Notes (PPGs) which have been issued or revised in recent years have emphasised the Government’s aims relating to sustainable development and incorporate sustainable development principles. A number of statements from the Office of the Deputy Prime Minister also address the issue of sustainable development, “Planning for Sustainable Development: Towards a Better Future (1998), “Sustainable Development and Planning” (2002), and The Local Government Act 2000. The Planning and Compulsory Purchase Bill proposes a statutory duty for planning as “...Contributing to the achievement of sustainable development”.

Planning Policy Guidance Notes (PPGs) give more detailed advice on sustainability issues, in particular PPG1 General Policy and Principles, PPG3 Housing, PPG6 Town Centres & Retail Development, PPG12 Development Plans, PPG13 Transport, PPG22 Renewable Energy, and PPG23 Planning & Pollution Control.

PPG3 sets out the Government’s proposals for meeting society’s need for additional housing and for creating more sustainable forms of development through

- Giving priority to re-using previously developed (brown field) land in urban areas;
- Bringing empty homes back into use;
- Converting existing buildings to housing;
- Employing a sequential approach to the identification and release of housing land;
- Building in ways which provide greater accessibility to jobs, education, other services and facilities by public transport;
- Reducing car dependence by facilitating more walking and cycling;
- Making more efficient use of land by reviewing planning policies and standards.

The principles of sustainability are also emphasised in Regional Planning Guidance for Yorkshire and the Humber (RPG), published in October 2001. A vision, objectives and strategy for delivering

a more sustainable region underpin the guidance. The current selective review of RPG gives the opportunity to expand and clarify regional guidance on sustainable development.

The Regional Sustainable Development Framework (RSDF) was published in February 2001 and is being updated for 2003 – 2005. It provides the sustainable development context for all regional strategies and plans. The framework fills the gap between national policy on sustainable development and local sustainable development policy, integrating work that has been carried out on Local Agenda 21 plans and informing forthcoming community plans. The framework contains 15 aims to improve the sustainability of the region. A sustainability appraisal system is included in the framework to enable any policy plan, project or proposal to be made as sustainable as possible. See section 4.1 and appendix 2 below for further details of RSDF.

The review of the 1994 Unitary Development Plan (UDP) was carried out in a context of the Government's aim that the principles of sustainability should underlie land use planning guidance and the development plans prepared by local authorities. Government advice was taken into account when reviewing the policies and reasoned justification in Part I, and identifying new proposals for development in Part II. The statutory land use plan for the District is now the UDP First Alteration, adopted in 2003.

Sustainability and community engagement are two of the main principles that underpin the work of the Council and its partners. The Council has demonstrated its commitment to these by ensuring that these principles are embodied in 'Fast Forward – The Wakefield District Community Strategy' (ratified June 2003). The current planning legislation and emerging local Area Panels provide the mechanism by which members of the community can participate in the planning process. The RSDF acknowledges that the community has a key role in planning for sustainable development.

### **3.0 DEFINITION OF SUSTAINABLE DEVELOPMENT**

The most widely used definition of sustainable development is "Development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (Bruntland Report 1997). The Government states that sustainable development "Is about ensuring a better quality of life for everyone, now and for generations to come" (A Better Quality of Life, UK Strategy for Sustainable Development, DETR 1999). This strategy contains four objectives:

- Social progress which recognises the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources;
- Maintenance of high and stable levels of economic growth and employment.

### **3.1 BASIC PRINCIPLES OF SUSTAINABLE DEVELOPMENT**

The planning system has traditionally been concerned with the impact of development on the locality, such as effect on amenity. The concept of sustainability requires consideration of a wider range of concerns including global impact of a development, as outlined below:

- Reducing the impact of human activity on the Earth's life support systems, including the maintenance of biodiversity. A key aspect of this is reduction of consumption of fossil fuels;
- Reducing the adverse impact of human activity on natural resources. These include soil, air, water, land and mineral resources;
- Creating a stable economy and society which reduces social inequity and enables a high quality of life for everyone.

These principles can be broken down further into considerations to be taken into account in respect of the location of new development, site layout, and the design of individual buildings, and it is these aspects which will be addressed by the Sustainable Development Guide.

A key purpose of the planning system is to promote sustainable development. Government guidance has therefore emphasised that land use policies and transport programmes be integrated to achieve sustainable patterns of development. The main principles outlined in the PPG's are that the location of development should:

- Make effective use of land within urban areas and minimise the need to develop green field sites, by directing development to previously developed land and encouraging a mix of uses, whilst protecting open space, green space and playing fields;
- Foster urban regeneration;
- Sustain and enhance the vitality and viability of existing centres;
- Conserve natural resources and our cultural heritage;
- Reduce the number and length of motorised journeys, particularly those made by private car;
- Encourage alternative means of travel which have less environmental impact, such as use of public transport, cycling and walking;
- Reduce reliance on private cars.

## **3.2 EQUITY AND COMMUNITY PARTICIPATION**

A key issue for sustainable development is community participation. It is important that people become involved in decision making and feel a sense of ownership and responsibility for their local area.

- Residential development will be expected to make a contribution to meeting affordable housing needs, as set out in the forthcoming Affordable Housing Supplementary Planning Guidance;
- Where there is an identified need, developers will be required to contribute to the provision of affordable community facilities for local people;
- Opportunities for urban regeneration should be maximised from developments on brownfield sites. The provision of local employment and training opportunities should be a priority;
- Developments should be designed to minimise opportunities for crime, both within the development and in the surrounding area, without detriment to the environment, as set out in the Council's "Designing Out Crime" Guidelines;
- New developments should be designed to reflect the needs of elderly people and of people with disabilities and restricted mobility;
- Developers will be encouraged to provide opportunities for local people to contribute their ideas on the specific form that developments should take.

### **3.2.1 RELATED STRATEGIES AND GUIDANCE:**

**DRAFT REVISED REGIONAL PLANNING GUIDANCE 2003**  
**"FAST FORWARD" WAKEFIELD DISTRICT COMMUNITY STRATEGY (WMDC)**  
**"DESIGNING OUT CRIME" DEVELOPMENT CONTROL GUIDELINES (WMDC)**  
**DRAFT COMMUNITY ENGAGEMENT FRAMEWORK (WMDC) [FORTHCOMING]**  
**DRAFT AFFORDABLE HOUSING SUPPLEMENTARY PLANNING GUIDANCE (WMDC)**  
**[FORTHCOMING]**

## **4.0 MEASURES FOR INCORPORATING SUSTAINABILITY INTO DEVELOPMENT**

### **4.1 SUSTAINABILITY APPRAISAL**

Sustainability appraisals are tools that enable sustainability aims to be built into the process of developing policies, action plans and projects. They work by assessing how well a proposal meets a predetermined set of sustainability aims. The results of an appraisal show how it is likely to contribute to sustainable development and where improvements can be made. Appraisals can be used to evaluate different possible options and identify which is the most sustainable. The results of an appraisal should be used to inform decisions made on the proposal to make it more sustainable.

Sustainability appraisals are a means to help us build sustainability into everyday activities, whether it is formulating strategies, delivering services or implementation of projects. Sustainability appraisals provide the means to ensure that sustainability issues are taken into account in a methodical and consistent manner.

#### **Regional Sustainable Development Framework**

The Draft Review of the Regional Sustainable Development Framework (RSDF) is a straightforward appraisal system that enables a proposal to be developed and evaluated using 15 aims (see appendix 2 for a list of these). The process can be summarised into the following stages:

- An initial scan of the contribution the proposal makes towards the 15 sustainability aims. This should take place at a very early stage in the development of the proposal;
- If a choice of options is being developed for the proposal, then an appraisal of each option should be undertaken;
- Once a final proposal has been agreed, a full and detailed appraisal should be undertaken to identify the positive and negative impacts. Mitigation measures for negative impacts should be identified, and indicators to monitor the sustainability of the proposal when it is implemented. If the full appraisal indicates that there is likely to be a significant impact in a particular area, then a more detailed examination of this should be undertaken;
- When a proposal is implemented it should be monitored to see how it performs against the outcomes expected from the appraisal.

Full details of the RSDF appraisal system and guidance on how to use it are contained in the RSDF Sustainability Appraisal Handbook. This is available on the Yorkshire and Humber Assembly website and can also be ordered in hard copy (see contacts in appendix 1).

#### **Wakefield District Community Strategy**

'Fast Forward - the Wakefield District Community Strategy' is based on the belief that all actions should

- Engage with and reflect the needs of local communities;
- Develop cohesive communities;
- Lead to sustainable improvements.

As part of the Strategy the Wakefield District Partnership has worked with Forum for the Future to develop 'Wakefield District Fast Forward Appraisal Toolkit'. It should be used at both the development and implementation stages of activities such as:

- Policy and programme development;
- Strategy and policy appraisal;

- Project assessment;
- Grant application assessment.

The Council is developing a Community Engagement Framework for the District which will strengthen the opportunities for community participation through the Area panels. This SPG concentrates on how principles of sustainable development can be applied in practice to the development process and is designed to be complementary to the Community Strategy.

## **4.2 SITE APPRAISAL**

Before submitting any development proposal it is important to examine the wider context of the site by carrying out a site appraisal which should identify the opportunities and constraints for sustainable development. The site appraisal should examine the site and its surroundings, and include an assessment of its accessibility, particularly in regard to public transport, walking and cycling. It is essential that the need to travel is minimised, in particular the reliance on private cars. Environmental gains made by energy efficient buildings will be nullified if occupiers of the development are reliant on energy intensive vehicles.

Appraisal of the site provides the basic information that is necessary to determine the site layout. The following factors should be considered when submitting and determining a planning application.

- Accessibility by public transport, walking, cycling and motor vehicles;
- The character of the surrounding area and the significance of the site within this;
- Site stability and contamination;
- Historic and archaeological interest in and adjacent to the site, including the setting of Listed Buildings;
- Existing buildings and potential for conversion or re-use;
- Solar radiation levels and direction;
- Wind speed and direction;
- Microclimate, soil type, drainage and water table;
- Ecology, vegetation and wildlife, in terms of biodiversity and amenity value;
- Boundary features, walls, hedges, trees etc;
- All water courses and bodies within and adjacent to the site in terms of drainage, flood risk and ecology;
- Levels of pollution within site and surrounding area, noise gradients, air quality, and potential for development to cause pollution;
- Energy such as potential for renewable sources or combined heat and power (CHP);
- Services, gas, water, electricity;
- Community facilities, shops, schools, health services etc.

Pre-application discussions and a good site appraisal will help to reduce problems and conflicts which sometimes emerge at later stages in the planning process. It is therefore advisable that developers contact Development Control prior to submitting a planning application.

## **4.3 TRANSPORT and ACCESS**

Developments should ensure that benign travel modes are given priority i.e. pedestrians and cyclists. It is particularly important that in residential development designs permit easy and safe movement of pedestrians and vulnerable groups such as children. Traffic should be distributed as evenly as possible throughout the development, with measures to keep speed to a minimum and the avoidance of opportunities for through traffic. The safe movement of pedestrians and cyclists into the area around the site needs be considered, together with links to public transport such as bus routes.

Site layout should be determined according to the following hierarchy, pedestrians and cyclists having priority for access, and private cars having the lowest priority. The Institute of Highway Technicians recommends acceptable walking distances which should not exceed 400m to a bus stop and 800m to local services (full details of acceptable walking distances are given in appendix 3).

#### **4.3.1 PEDESTRIANS**

- Provide convenient routes, which are easy, safe and attractive to use;
- Provide lighting and clear sign posting where appropriate;
- Ensure that routes are accessible to disabled people, particularly wheelchair users;
- Ensure that there is good, direct access throughout the site;
- Link routes to local facilities, public transport nodes, open spaces, and longer distance footpaths;
- Design for slow traffic speeds to improve safety and reduce noise;
- Provide conveniently located pedestrian crossing points on busy sections of road;
- Avoid steep gradients;
- Provide a pleasant microclimate through planting for shelter and orientation towards the sun whilst ensuring that routes are safe for everyone to use;
- Provide wayside seating at appropriate locations;
- Ensure that the development provides a lively and varied environment at street level through appropriate ground floor uses.

#### **4.3.2 CYCLISTS**

- Provide direct, safe and attractive routes segregated from general traffic only where cyclists cannot safely be accommodated in the carriageway;
- Ensure that routes are as continuous as possible, avoiding frequent stops or diversions;
- Link routes within developments to the wider cycle network;
- Measures to assist the safety of cyclists should be provided at major junctions and all junctions should be of cycle friendly design;
- Separate cycle tracks may be an option for large developments, if they can rejoin the road network safely;
- Provide a pleasant microclimate, particularly low wind speeds, through landscape and site layout;
- Provide prominent, secure cycle parking which should be close to building entrances or inside buildings, avoiding the need to carry cycles up steps;
- Employers should provide a high standard of secure long stay cycle parking together with appropriate changing and shower facilities;
- Joint pedestrian and cycle facilities may be considered only in circumstances where separate facilities for cyclists in the carriageway is not feasible, and pedestrian safety must not be compromised.

#### **4.3.3 PUBLIC TRANSPORT AND SERVICE VEHICLES**

- Adequate penetration for potential bus services and effective access for service vehicles should be provided. This should not be at the expense of safety and free movement of benign travel modes;
- Layouts should be to the minimum possible geometric standard commensurate with safe access for buses and service vehicles in order to prevent excessive traffic speeds;
- Passenger facilities such as bus shelters and timetable information should be provided, where appropriate, in consultation with Metro;

- For large developments adjacent to existing rail network the potential for providing new rail stations should be considered in consultation with Metro;
- Other public transport enhancements may be required where a development will generate additional demand that justifies or requires improvements to the public transport system. In these cases a contribution towards improving public transport may be required.

#### **4.3.4 PRIVATE VEHICLES**

- New roads serving development should be engineered using geometric designs for an average speed of 20 mph or less, particularly at junctions and pedestrian/cycle crossings, and should ensure the dominance of benign travel modes;
- Traffic speeds in residential development should not exceed 20 mph;
- Provide traffic free areas wherever possible.

#### **4.3.5 GREEN TRAVEL PLANS (COMPANY TRAVEL PLANS)**

It is increasingly accepted that how people travel to and from work is, in part, the responsibility of their employer. Developers will be expected to formulate a Green Travel Plan covering all transport requirements. It should consider the scope for measures such as car sharing, incentives to use public transport or to cycle or to walk, support for new bus or rail services, flexible working, and the movement of goods and deliveries. The preparation of a plan and the introduction of incentives to encourage staff to travel by alternative means other than by private car can free up areas used for car parking for more productive uses.

Company travel plans should seek to introduce a package of measures aimed at reducing use of cars for commuting and work related journeys. These measures may include:

- Providing assistance for cycle and travel card purchase;
- Encouraging and offering incentives to employees to use public transport;
- Considering providing dedicated free transport to work, e.g. mini bus
- Providing cycle allowances at rates in line with car allowances;
- Providing secure, all weather cycle parking, with changing and shower facilities;
- Offering incentives and benefits to those willing to share cars or providing specific parking spaces to car share vehicles;
- Providing pool cars for work related journeys;
- Ensuring pedestrian routes within the site are safe, pleasant and direct;
- Making travel plan co-ordination the responsibility of a senior manager;
- Integrating teleworking and compressed working weeks into the Green Travel Plan;
- Providing high quality links to public transport, e.g. direct access, shelters, timetable information;
- Offering financial incentives to reduce car use, e.g. wage enhancement in lieu of parking places.

#### **4.3.6 CAR FREE DEVELOPMENT**

Car free residential development may be appropriate in some locations. These will generally be sites within the urban area that have good access to public transport, cycle and pedestrian routes, and a close range of facilities such as shops, schools and other amenities. A legal agreement with occupants that they will not own a car (to ensure that off site parking problems do not result) will be required.

#### **4.3.7 UDP POLICIES:**

**T2 TRANSPORT AND NEW DEVELOPMENT**

**T3 PUBLIC TRANSPORT PEDESTRIAN ACCESS**

**T4 INTEGRATED PUBLIC TRANSPORT SYSTEM**

**T16 FACILITIES FOR CYCLISTS, PEDESTRIANS AND PEOPLE WITH SPECIAL NEEDS**

**T20 PROVISION FOR PEDESTRIANS, CYCLISTS AND PEOPLE WITH SPECIAL NEEDS TO BE INTEGRATED INTO TRAFFIC MANAGEMENT AND HIGHWAY IMPROVEMENT SCHEMES. PROVISION FOR NEW SECTIONS OF CYCLE TRACKS AND EXTENSION OF THE NETWORK.**

#### **4.3.8 OTHER RELATED STRATEGIES AND GUIDANCE:**

**FAST FORWARD” WAKEFIELD DISTRICT COMMUNITY STRATEGY (WMDC)**  
**DRAFT COMMUNITY ENGAGEMENT FRAMEWORK (WMDC) [FORTHCOMING]**  
**“DESIGNING OUT CRIME” DEVELOPMENT CONTROL GUIDELINES (WMDC)**  
**PARKING STANDARDS (WMDC) [FORTHCOMING]**  
**CYCLING STRATEGY (WMDC)**  
**WALKING STRATEGY (WMDC)**  
**WEST YORKSHIRE LOCAL TRANSPORT PLAN**

## **4.4 ENVIRONMENTAL IMPACT**

Issues of environmental quality, conservation of the natural and built environment and local distinctiveness are central to the concept of sustainable development. The layout and design of the site is critical in determining the environmental impact of the development. Environmental considerations need to be given thorough attention at the site planning stage.

### **4.4.1 BIODIVERSITY**

Any new development should ensure that negative impact on wildlife and habitat resources is minimised. Appropriate ecological surveys should be carried out to identify the impact of the development upon biodiversity as part of the pre-application site appraisal. Where adverse impacts are identified mitigation measures will be required.

#### **PROTECTING EXISTING WILDLIFE AND HABITATS**

- Development should avoid adverse impacts on protected nature conservation sites such as SSSI's, SSI's and LNR's;
- Consider the impact of the development on rare and endangered species (listed in the UK Biodiversity Action Plan), ensuring that there are no adverse impacts on these species;
- Existing features of wildlife value should be retained and enhanced where appropriate;
- The piping and canalisation of watercourses should be avoided.

#### **CREATING AND MANAGING WILDLIFE HABITATS**

- An ecological approach to site landscaping and green space should be adopted. This should reflect local semi-natural vegetation types where appropriate;
- Seek to enhance resources for wildlife through creating habitats and improving links between areas of habitat, and by appropriate management;
- All new planting should reflect local variations across the district;
- Opportunities to re-open culverts, re-establish natural watercourses and enhance the wildlife value of watercourses should be maximised;
- Peat based composts should be avoided;
- Developers should make provision for the long-term management of nature conservation resources. Future management of the site needs to be considered at the design stage.

### **4.4.2 LANDSCAPE DESIGN**

Landscape features and green space associated with development should be considered as an integral part of the design process. As well as providing a setting for the buildings, landscaped areas and green space offers useful areas for amenity and wildlife, infiltration areas for surface water and an opportunity to retain and enhance existing features such as trees and hedgerows. The site layout should seek to provide a hierarchy of space from public to private. Structural landscape works or features should be used to modify microclimate and to reduce noise from roads. Rear gardens should be designed to have maximum privacy and, where possible, provide enough space for growing food and recycling kitchen waste.

- Landscape design should seek to minimise opportunities for crime;
- Consideration should be given to the contribution of site landscaping to nature conservation;
- Significant areas of tree planting can act as air filters and also absorb carbon dioxide. Planting is therefore particularly important adjacent to main roads;
- Landscape areas should be designed, where possible, to enable infiltration of surface water from the development;
- Species appropriate to the location should be selected for planting. Consideration should be given to value for wildlife, the mature height and spread of trees and the distance from buildings, structures and services;

- Developers will be expected to make provision for the long-term maintenance of site landscaping.

#### **4.4.3 NATURAL RESOURCES**

All development should seek to minimise overall consumption of non-renewable resources, including land, and to prevent damage to natural resources.

#### **PROTECTING WATER RESOURCES**

The impact of the development on flooding and water quality, protecting features such as floodplains, watercourses, ponds and wetlands, their flood capacity, amenity value and habitats together with the potential impact on ground water should be considered at the site identification stage. The impact of the development on the whole water catchment area should be considered, particularly the potential for adverse affects such as flooding or pollution outside the site. The site layout should seek to minimise impacts on the natural, built and water environment by reducing the quantity and impact of surface water run off, improving its quality and maximising the creation of amenity and habitats. Developers will be expected to make provision for the long-term management of water conservation features.

- The piping and canalisation of watercourses should be avoided wherever possible, and opportunities to re-establish natural watercourses, floodplains, channels, margins, wetlands and their habitats should be maximised;
- The amount of non-porous hard surfacing should be minimised to enable infiltration;
- The use of green roof and other sustainable roofing techniques should be maximised to reduce the impact of runoff;
- Downstream watercourses should be protected from the adverse effects of excess surface water run off, both in volume and quality;
- Infiltration methods, such as soakaways, should be used wherever possible and where soil conditions permit;
- Where surface water cannot be absorbed on site provision should be made for open balancing ponds which should be designed to maximise their wildlife value;
- Where site drainage is to a combined sewer the impact of any increased flow on combined sewer overflows should be considered and minimised;
- Install robust sustainable urban drainage systems (SuDS) in addition to oil interceptors and silt traps to improve the quality of any surface water discharge;
- Provide facilities for rainwater recycling and collection for re-use;
- Where possible, site landscaping should utilise plant species which do not require a lot of water.

#### **PROTECTING LANDSCAPE FEATURES AND GREEN SPACE**

- Greenfield sites should be avoided wherever possible as their development results in irreversible loss of green space;
- Compact development which reduces land take will be encouraged;
- Identify all areas of vegetation and landscape features to be retained, and protect them with fencing during construction;
- Pay particular attention to the desirability of retaining mature trees and hedges on site. Buildings and services should avoid damaging tree roots;
- Seek to reintroduce traditional management techniques of existing features where appropriate, such as hedge laying, hay making and coppicing.

#### **PROTECTING SOILS**

- Assess soil conditions before work commences and restrict vehicle movements to minimise compaction;

- Minimise the area of disturbance during construction and fence areas where soils and vegetation are to remain undisturbed;
- Topsoil should be stripped and stored carefully in order to avoid contamination;
- Use mulches, netting and geotextiles to protect soil on slopes;
- Effort should be made to ensure the re-use of topsoil on site;
- The importation of topsoil should be avoided or minimised, unless site conditions dictate otherwise;
- The use of substitute artificial topsoil should be considered in low-fertility habitats, for example restoration of degraded brownfield land.

## **PROTECTING AIR QUALITY**

Clean air is an essential ingredient of a good quality of life. People have a right to expect that the air they breathe will not harm them. A local regime of air quality management is now in place, refer to appendix 4 for details.

- Consideration should be given to the impact of the development on air quality, in terms of emissions from vehicles, construction (e.g. dust), and, where appropriate, emissions from industrial processes or activities of occupiers;
- Ensure that the development does not cause worsening of local air quality by taking appropriate measures to minimise its impact.

### **4.4.4 HISTORIC ENVIRONMENT and URBAN DESIGN**

It is important that new development fits into its surroundings and respects the character of an area. The design of buildings, materials and landscaping should be of good quality and offer a positive contribution to the locality. Where there are historical or archaeological features these should be evaluated prior to development of the site, and adequate measures for their preservation taken.

- All new development should respect the unique and positive local characteristics of the area, together with its cultural background, where appropriate;
- Wherever possible, existing buildings should be retained and refurbished;
- All features of historic, archaeological, cultural and aesthetic value should be retained, and enhanced where appropriate;
- Special attention should be given to development affecting the character of a Listed Building, a Conservation Area, or site of archaeological value. The aim should be to safeguard the survival of historic buildings and features, and to enhance the setting when appropriate;
- Buildings should be designed for safety, security and comfort. They should be durable and adaptable to changes of use. Materials and design should be of good quality and make a positive contribution to the character of the locality;
- Urban greenspace should be retained, and wherever possible new development should incorporate high quality greenspace and landscaping.

### **4.4.5 UDP POLICIES:**

**E1 – E4 PROTECTION AND ENHANCEMENT OF HABITATS**

**E5 – E10 PROTECTION AND PLANTING OF TREES, WOODLAND AND HEDGEROWS**

**E13 – E19, E63 PROTECTION OF ARCHAEOLOGY AND THE HISTORIC LANDSCAPE**

**E20 – E26 PROTECTION OF HISTORIC BUILDINGS AND ARCHITECTURAL INTEREST**

**E27– E35 PROTECTION OF CONSERVATION AREAS**

**E36 – E38, E52, E59 URBAN DESIGN**

**E42 – E51, E65 ENVIRONMENTAL IMPACT AND PROTECTION FROM POLLUTION**

**E53 – E57 LANDSCAPING**

**L3 PROTECTION OF OPEN SPACE IN URBAN AREAS**

**OL6 PROTECTION OF WASHLANDS**

#### **4.4.6 OTHER RELATED STRATEGIES AND GUIDANCE:**

**GREEN PLAN (WMDC)**

**“DESIGNING OUT CRIME” DEVELOPMENT CONTROL GUIDELINES (WMDC)**

**SHOPFRONT DESIGN/SECURITY/SIGNS GUIDES (WMDC)**

**DEVELOPMENT AND FLOOD RISK PLANNING GUIDANCE NOTE NUMBER 1 (WMDC)**

**SUSTAINABLE DRAINAGE GUIDE (WMDC) [FORTHCOMING]**

**DRAFT DRAINAGE STRATEGY (WMDC) [FORTHCOMING]**

**CIRA SUSTAINABLE URBAN DRAINAGE SYSTEMS MANUALS C522 AND C523**

**GREEN SPACE STRATEGY (WMDC) [FORTHCOMING]**

**LANDSCAPE CHARACTER ASSESSMENT (WMDC) [FORTHCOMING]**

**BIODIVERSITY AUDIT (WMDC)**

**WOODLAND STRATEGY (GROUNDWORK WAKEFIELD/WMDC) [FORTHCOMING]**

**DEVELOPMENT AND AIR QUALITY SPG (WMDC) [FORTHCOMING]**

## **4.5 INFRASTRUCTURE, ENERGY and WASTE**

### **4.5.1 SERVICE INFRASTRUCTURE**

Services should be designed to provide maximum flexibility for the future, and to minimise the impact on existing landscape and habitats. Consideration also needs to be given to any off site impact, such as drainage. Sustainable Urban Drainage Systems (SUDS) should be used within all new development. Particular care also needs to be taken to ensure that trenches do not damage important wildlife habitat or trees. Service infrastructure will have an impact on the availability of areas for tree planting, so routes need to be carefully planned and co-ordinated.

### **4.5.2 COMBINED HEAT AND POWER (CHP)**

Potential for CHP or district heating systems should be considered where excess heat from power generation or waste heat from industry is piped to the local area. Metering is important to encourage efficient consumption. It is important that provision is made for the necessary infrastructure within the site layout, alternatively the pattern of development should be appropriate for the necessary infrastructure to be added at a later date. CHP and district heating is facilitated by schemes which:

- Adopt a grouping and density which reduces installation and transmission costs;
- Are located close to the potential power/heat source;
- Comprise of a mix of uses (housing, offices and leisure) which balance the demand for power/heat over day/night and throughout the year.

### **4.5.3 MAXIMISING SOLAR HEATING**

The layout of a site has a direct impact upon the potential for maximising passive and active solar gain. Passive solar gain alone can save up to 10% of heating demand and does not impose any significant additional costs or design constraints on a development.

- Residential roads should run east-west wherever possible to enable the orientation of dwellings to face within an angle of 30 degrees of due south;
- Consider the impact of trees, buildings, walls and fencing on overshadowing, which will reduce the scope for passive solar heating.
- Consider the orientation of slopes. Maximum use should be made of south facing slopes which allows closer spacing of buildings and trees (while still avoiding overshadowing). North facing slopes may suffer from overshadowing and frost;
- Generally all buildings should be sited to avoid overshadowing neighbouring buildings, giving particular attention to the impact of taller buildings;
- Car parking and garages should be located to the north of buildings;
- Consider the use of active solar technologies, such as photovoltaics;
- On residential sites house types can be modified to achieve passive solar gain objectives.

### **4.5.4 MINIMISING HEAT LOSS**

The shelter afforded to a building, particularly from prevailing winds, will affect the degree of heat loss. It is possible to achieve sheltered microclimates.

- Group buildings and avoid long uninterrupted passages and short gaps between buildings;
- Joining buildings creates shelter and reduces external wall to volume ratio;
- Build to a uniform height;
- Use densely planted shelter belts, taking care to avoid overshadowing;
- Avoid development in frost pockets or on exposed hill crests;
- Design large buildings to avoid increasing air speed and turbulence.

## **4.5.5 WASTE MANAGEMENT**

The need to reduce the amount of waste in the environment is a key issue of sustainability.

- Appropriate treatment of contaminated sites to enable development will be encouraged;
- Maximising the re-use of existing buildings/structures on site, or where they cannot be re-used, utilising the materials within the new development (stone, slate, tiles, timber, paving and bricks are generally suitable);
- Excess material from construction and demolition should be minimised, and should not be disposed of on site;
- Ensure facilities are provided for the recycling of construction and demolition waste;
- Facilities should be provided for the separation and collection of materials for recycling in all developments (e.g. bottle, can and paper banks) ensuring site layout accommodates easy collection;
- Ensure there is adequate space for bins/recyclable waste storage for occupiers of the development;
- Provision of facilities for the collection of organic and garden waste for composting should be considered, (e.g. home composting bins, garden waste recycling bins);
- Composting toilets and reed bed systems for the treatment of foul water should be considered.

## **4.5.6 UDP POLICIES:**

**E60, E61 CABLING AND ELECTRONIC TRANSMISSION EQUIPMENT**  
**OL11 WASTE MANAGEMENT HIERARCHY**  
**OL20 RENEWABLE ENERGY**

## **4.5.7 OTHER RELATED STRATEGIES AND GUIDANCE:**

**DRAFT STRATEGY FOR THE MANAGEMENT OF MUNICIPAL WASTE IN WAKEFIELD (WMDC)**  
**DEVELOPMENT AND FLOOD RISK PLANNING GUIDANCE NOTE NUMBER 1 (WMDC)**  
**SUSTAINABLE DRAINAGE GUIDE (WMDC) [FORTHCOMING]**  
**DRAFT REVISED REGIONAL PLANNING GUIDANCE 2003**  
**REGIONAL WASTE STRATEGY 2003**

## **4.6 SUSTAINABLE BUILDINGS AND CONSTRUCTION**

There is a growing number of examples of sustainable buildings being developed around the world ranging from low-tech earth dwellings to buildings which incorporate the full range of high-tech solutions. Neither extreme needs to be adopted to produce sustainable buildings; there are many small changes and amendments which can be made to fairly standard building types which will result in more sustainable development. If these are considered and incorporated at the site appraisal and design stages they can result in successful, sustainable development and any additional costs will be kept to a minimum. By making changes to the way houses, for example, are constructed improvements can be achieved in the health of the occupants and a contribution can be made to meeting the Kyoto Protocol. If properly planned and designed, the development will contribute to the sustainability of the neighbourhood.

### **4.6.1 RE-USING EXISTING BUILDINGS**

Buildings are more than just a collection of materials. They contribute to the street scene and to a sense of place. With greater emphasis on the re-use of previously developed land and existing buildings, it should always be a priority to consider the re-use of existing buildings. This can offer opportunities to improve and modernise standards of insulation, heating, lighting and ventilation and minimise the use of new materials. With insulation improvements and condensing gas central heating a re-used building can achieve an energy efficiency rating which compares favourably with modern new build.

Key considerations include:

- whether the building can be adapted to meet current needs;
- looking for opportunities to improve the energy efficiency of the building;
- designing conversions and refurbishments to reduce energy use to compensate for the embodied energy of new materials used;
- taking into account removal of any hazardous materials present, for example asbestos.

### **4.6.2 ENERGY USE and ASSESSMENT**

A building uses energy in two ways; in the production of materials and construction process – ‘embodied energy’ and in the use of the building once completed – ‘operational energy’. Ways of minimising embodied energy are indicated on the diagram and the Centre for Sustainable Construction at the Building Research Establishment offers technical advice.

Operational energy can be minimised in a number of ways, also indicated on the diagram. In addition the Government and other bodies have introduced a number of ways of assessing the energy efficiency of buildings.

#### **Building Regulations**

Part L1 of the Building Regulations requires conservation of energy in dwellings through;

- limiting heat loss;
- providing space heating and hot water systems which are energy efficient;
- if providing external lighting systems which are fixed to the building, ensure the lamps are appropriate and controls sufficient so that energy can be used efficiently;
- providing sufficient information with the heating and hot water services so that occupiers can operate and maintain the services in such a manner as to use no more energy than is reasonable in the circumstances.

Part L2 of the Building Regulations requires similar energy conservation measures in buildings other than dwellings.

## **Assessments**

There are a number of assessments which can be applied to buildings to check their energy efficiency. These include:

### **Standard Assessment Procedure (SAP)**

The Standard Assessment Procedure for Energy Rating of Dwellings (SAP) was introduced by the government. It is a statutory requirement for all new dwellings under Part L of the Building Regulations and is gradually being replaced by the Carbon Index. Developers are advised to consult the ODPM for the current position.

### **National Home Energy Rating (NHER)**

This organisation provides computer software for assessing energy efficiency, including

- The Building Energy Performance Index (BEPI) Building Fabric Index;
- Annual CO<sub>2</sub> emissions;
- Annual Running Costs;
- The Affordable Warmth Index;
- Surface condensation;
- Materials cost file;
- Analysis of dwelling temperature;
- Accurate running costs;
- U-value calculator.

### **Building Research Establishment Environmental Assessment Method (BREEAM)**

This is a widely used means of reviewing and improving the environmental performance of many types of building. A bespoke version can be used to assess sheltered housing and student flats. The version for dwellings is called EcoHomes and is sponsored by the National House Building Council (NHBC). It covers houses as well as apartment buildings and can be applied to both new and renovated dwellings.

EcoHomes balances environmental performance with the need for a high quality of life and a safe and healthy internal environment. The issues assessed are grouped into seven categories: energy; water; pollution; materials; transport; ecology and land use; health and well-being. Many of the issues are optional, ensuring EcoHomes is flexible enough to be tailored to a particular development or market. The Council would like to see all new dwellings built to Ecohomes 'Very Good' or 'Excellent' standard.

Information about BREEAM and Ecohomes can be obtained from the Building Research Establishment. Please see Appendix 1 for contact details.

## **4.6.3 BUILDING DESIGN**

Approximately half the total UK energy consumption is used in heating, lighting and servicing buildings. In addition around 50% of the UK CFC production is produced by such things as air conditioning, refrigeration, fire extinguishers and insulation.

As a general principle sustainable buildings should be designed for long life, low maintenance and energy efficiency. They should be constructed of low energy, locally produced renewable materials and adaptable to meet changing needs.

A building is more likely to be re-used if it can be easily adapted to new uses. A building height of 4 storeys is usually sufficient to allow most activities whilst remaining compact and at a human scale and avoiding a reliance on lifts and escalators. A mix of uses within a development can make more efficient use of space and contribute to higher density, for example living accommodation over shops. Innovative designs should be capable of incorporating sustainable features without compromising the requirements of other legislation, for example the Disability Discrimination Act.

#### **4.6.4 SUSTAINABLE CONSTRUCTION**

The design and construction industry has a key role to play because the built environment has such a significant impact on many sustainability issues. 360 million tonnes of construction materials are used in the UK every year, and around 70 million tonnes of construction and demolition waste are produced every year (approximately 17% of total waste). In 1999, 8.1 million tonnes of such waste were disposed of in the Yorkshire & Humber Region, 33% to landfill. This was the highest of all regions and significantly higher than the national average of 24%. The Regional Waste Strategy (July 2003) seeks to reduce the amount of waste produced, particularly that going to landfill. The Draft Revised Regional Planning Guidance includes policies to encourage sustainable use of physical resources and construction.

The Building Research Establishment (BRE) is currently devising a system of Environmental Performance Indicators and monitoring to measure the sustainability of building projects. In the meantime this guide is aimed at encouraging developers to consider how their developments can be made more sustainable, both during the design and construction phase and for the community and future generations.

The following is a list of overall objectives developers should take into account when considering the sustainability of their project. Some relate to the wider social, economic and environmental impacts on the community, such as

- Maximise local skills;
- Use local resources and supplies;
- Promote ethical purchasing of goods and services;
- Reduce crime and fear of crime through design measures;
- Improve and increase community facilities;
- Increase community participation at the planning stages;
- Provide appropriate housing for local needs;
- Ensure essential services are within non-car based travelling distance.

Some relate to the design and construction phase, such as

- Increase the use of sustainable building materials – recycled, locally produced and less polluting materials;
- Minimise quantities of materials used;
- Ensure adequate health and safety measures on site;
- Reduce the causes of accidents.

But they all contribute to the main goal of sustainable development.

Overleaf diagrams illustrate where specific changes can increase the sustainability of a building and development. Most of the measures can be adapted for use in domestic, commercial and industrial development.

**OTHER RELATED STRATEGIES AND GUIDANCE  
DRAFT REVISED REGIONAL PLANNING GUIDANCE 2003  
REGIONAL WASTE STRATEGY 2003**

## **(Diagram) For 'Exterior' illustration**

### **Substructures & Basements**

Basements can add useful space & enable more efficient use of individual plots, but consider the following;

- large areas of cut & fill mean material must be transported to & from the site
- impact on surface water drainage & the existing water table
- minimise adverse impacts on soil resources
- design foundations which preserve trees
- 'partial depth' basements provide for better natural lighting, ventilation & damp-proofing than conventional basements
- basements can provide a substructure that is less susceptible to frost heave, settlement & moisture changes in the subsoil.
- do not allow substandard living accommodation to be created

### **Walls**

- provide thermal insulation above current Building Regulation requirements
- planting on walls helps reduce heat loss & airborne dust & provide a wildlife habitat
- support local distinctiveness by using local materials & styles

### **Windows**

- keep number & size of north facing windows to a minimum
- ensure a balance between size of windows & the need for privacy & security
- consider using self-cleaning glass, at least on upper floors

### **Roofs**

- pitched roofs require less maintenance than flat roofs
- install solar panels on pitched roofs facing between 15 & 40 degrees of due south
- avoid trussed rafters to allow future creation of rooms in roof space
- steeper pitched roofs facing prevailing winds can help to break up wind flow
- use extensive, low maintenance green roofs to reduce roofwater run-off & provide wildlife habitats
- support local distinctiveness by using local materials & styles

### **Floor Plans**

- locate kitchen areas & storage space to the north in commercial buildings
- construct garages & storage areas on the ground floor, beneath living areas

### **Conservatories & Porches**

- locate conservatories on south, west or east facing walls.
- do not provide heating to conservatories
- ensure wall between conservatory & house is properly insulated
- use draught lobbies/entrance porches to reduce heat loss through external doors

### **Heating**

- use active solar technology for heating or power generation wherever possible

### **Water Use & Conservation**

- provide rainwater collection facilities for recycling as 'grey water' for watering plants
- install a reed bed system for foul water treatment

### **Reducing Heat Loss**

- consider including flats & terraced houses to reduce the surface area for heat loss
- in non-residential developments consider the potential for linking buildings
- attached conservatories, garages, greenhouses & porches can form thermal buffers
- on sloping sites, cut buildings into the slope
- consider earth shelters; they provide good sound & heat insulation & can reduce impacts in sensitive locations

#### **Space around Buildings**

- provide convenient & secure cycle storage within both commercial & domestic buildings
- plant trees around and between buildings for shelter & shade
- incorporate sympathetic and appropriate landscaping
- provide composting facilities
- ensure waste bin area is accessible and secure
- reduce crime through design & landscaping measures
- use energy efficient lighting
- install minimum lighting level necessary
- avoid uncontrolled floodlighting and fit shades where appropriate

#### **Accessibility & Inclusivity of Buildings**

- consider the effect on accessibility of the location of the building within the plot
- amend design and layout to incorporate the gradient of the plot
- consider the relationship of the development to adjoining and neighbouring buildings
- ensure accessible and inclusive links to pedestrian and cycle routes, and transport infrastructure
- comply with appropriate mandatory design standards and codes of practice

#### **Building Materials**

- specify locally produced materials
- use natural materials for low impact building and insulation
- ensure timber is from sustainable sources
- plastic, steel & aluminium, particularly PVCu, should be used sparingly
- use recycled materials wherever possible
- specify cement & lightweight concrete blocks made from waste or by-product materials
- avoid specifying materials which cannot easily be separated for re-use/recycling

### **(Diagram)For 'Interior' illustration**

#### **Walls**

- ensure good sound insulation, especially in high density developments

#### **Windows**

- incorporate sufficient windows to provide natural lighting & ventilation
- maximise passive solar gain by enlarging south facing windows
- consider installing triple glazing
- reduce heat loss by using low emissivity glass
- install timber frames for better thermal resistance

#### **Floor Plans**

- orientate living rooms to south to maximise solar gain
- orientate kitchens, utility rooms, stairs, halls & bathrooms to the north
- locate stair wells & service ducts to enable easy future adaptation of living space
- provide storage areas for containers for recyclable materials

## **Heating**

- enable optimum efficiency by using the smallest appropriate system
- install high efficiency condensing boilers
- in the short term use gas in preference to electricity (this may change as the proportion of electricity generated from renewable resources increases)
- install systems that are adaptable to different fuels in the future
- install heating systems capable of being upgraded to include heat recovery from waste air/water & ambient sources of energy, especially in commercial & industrial buildings
- fit timers & individual radiator thermostats as standard
- provide flues with heat exchangers
- install Energy Management Systems in commercial buildings

## **Lighting & Ventilation**

- maximise natural lighting & ventilation. A plan depth of up to 13 m allows for natural daylighting & ventilation from windows on both sides
- increase natural lighting in larger buildings by incorporating atria & glazed courtyards
- atria & glazed courtyards can be used to induce a stack ventilation effect
- do not fully heat glazed courtyards & atria
- introduce natural daylight into large, single storey buildings by incorporating rooflights
- minimise the use of air conditioning. If it must be used, specify a low energy system & install a heat exchanger
- provide natural ventilation for larger buildings, such as offices & shopping centres, using wind towers, associated with a central atrium
- install Building Management Systems to ensure that passive & active environmental systems are operating as efficiently as possible
- use energy efficient, compact fluorescent lighting
- fit timing & intensity controls for lighting

## **Water Use & Conservation**

- install a 'grey water' recycling system for toilet flushing
- install efficient appliances that enable reduced water consumption
- fit low volume flush WC's & flow restrictors to taps
- provide facilities for heat exchange from waste water
- fit composting toilets where appropriate

## **Reducing Heat Loss**

- fit all windows & external doors with draught seals
- in commercial buildings with large doorways incorporate air lobbies to reduce heat loss
- incorporate energy efficiency measures in all conversion and/or refurbishment schemes

## **Accessibility & Inclusivity of Buildings**

- comply with appropriate mandatory design standards and codes of practice
- consider designing dwellings to 'lifetime homes' standard

## Sustainable Development Guide Appendices

### Appendix 1 – Contacts

Building Research Establishment (BRE)  
Garston  
Watford  
WD25 9XX  
Tel 01923 664300 [environment@bre.co.uk](mailto:environment@bre.co.uk)

Regional Assembly for Yorkshire and Humberside  
18 King Street  
Wakefield  
WF1 2SQ Tel 01924 331555  
(Regional Sustainable Development Framework)  
[www.yhref.org.uk](http://www.yhref.org.uk) (For viewing RSDF and other regional policy documents)

Metro  
West Yorkshire Passenger Transport Executive  
Wellington House  
42-50 Wellington Street  
Leeds  
LS1 2DE Tel 0113 251 7272  
(Public transport advice)

Yorkshire Renewable Energy Network (YREN)  
Alternative Technology Centre  
Hebden Bridge  
HX7 6BR  
[www.yren.org.uk](http://www.yren.org.uk) [info@yren.org.uk](mailto:info@yren.org.uk) Tel 0845 330 4930  
(Information, technical and funding advice about renewable energy in Yorkshire & Humber Region)

Environment Agency  
North East Region HQ Tel 0113 2440191  
[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)  
(Sustainable drainage and flooding)

Earth Centre  
Denaby Main  
Doncaster  
DN12 4EA  
[www.earthcentre.org.uk](http://www.earthcentre.org.uk) [info@earthcentre.org.uk](mailto:info@earthcentre.org.uk) Tel 01709 513933  
(Has a Green Business Directory listing green companies and businesses in Yorkshire)

Action Energy  
[www.actionenergy.org.uk](http://www.actionenergy.org.uk) [info@actionenergy.org.uk](mailto:info@actionenergy.org.uk) Tel 0800 585794  
(Advice for businesses and public sector organisations on reducing energy consumption)

WMDC Energy Efficiency Team  
[mhooton@wakefield.gov.uk](mailto:mhooton@wakefield.gov.uk) Tel 01924 302467

## **Appendix 2: The RSDF checklist**

### **Sustainable Development Aims and Associated Objectives**

#### **1 Good quality employment opportunities available to all**

- Will it provide employment opportunities for local people?
- Will it promote or support equal employment opportunities?
- Will it promote healthy working lives (including health and safety at work, worklife/home-life balance and family friendly policies)?
- Will it offer employment opportunities to disadvantaged groups?

#### **2 Conditions which enable business success, economic growth and investment**

- Will it support the voluntary sector and/or promote volunteering?
- Will it maximise local skills?
- Will it encourage inward investment?
- Will it enhance competitiveness through advice, mentoring and/or support?
- Will it set up and support local and regional supply chains?
- Will it increase investment in plant, machinery and R&D?
- Will it support community-based businesses and/or support local self-help schemes, e.g. credit unions?
- Will it promote ethical purchasing of goods, services and financial services?

#### **3 Education and training opportunities which build the skills and capacity of the population**

- Will it promote lifelong learning?
- Will it provide appropriate on-the-job training?
- Will it improve levels of basic skills and/or Information/ Communication Technology (ICT)?
- Will it support the voluntary sector and/or promote volunteering?
- Will it ascertain skills/skills training gaps and/or provide specialised training for areas in transition?
- Will it build the confidence, self-esteem and capacity of individuals?
- Will it provide and promote sustainable development education?

#### **4 Conditions and services which engender good health. If health impacts are a significant result of the activity, consider a health impact assessment.**

- Will it improve equitable access to health services?
- Will it improve the quality of health services?
- Will it treat ill-health?
- Will it deliver health education and promotion (healthy lifestyles, screening, etc.)?
- Will it address health inequalities?
- Will it promote access to affordable housing?

#### **5 Safety and security for people and property**

- Will it reduce crime through design measures?
- Will it address the causes of crime and/or reduce crime through intervention?
- Will it prevent re-offending?
- Will it provide crime and safety advice?
- Will it reduce fear of crime?
- Will it reduce causes of accidents (including causes of road traffic accidents, e.g. driving standards)?

#### **6 Vibrant communities which participate in decision making**

- Will it build social and community capital, capacity and confidence?
- Will it increase community participation in activities and/or in the democratic process?
- Will it where appropriate, devolve decision-making to communities?
- Will it support the community sector and volunteers?
- Will it support civic engagement?
- Will it encourage supportive personal and community networks?
- Will it improve and increase community facilities?

## **7 Culture, leisure and recreation activities available to all**

- Will it increase provision of CLR activities/venues?
- Will it increase non-car-based access to CLR activities?
- Will it increase participation in CLR activities by tourists and local people?
- Will it provide support for CLR providers and/or creative industries?
- Will it preserve, promote and enhance regional culture and heritage?
- Will it improve access and affordability of CLR facilities which engender health and quality of life?

## **8 Local needs met locally**

- Will it provide direct support for local traders and suppliers through advice, information and training?
- Will it support the formation, maintenance and use of local and regional supply chains for goods and services?
- Will it ensure that essential services (e.g. health services, shops) and resources to serve communities are within reasonable non car-based travelling distance?
- Will it provide appropriate housing for local needs?
- Will it support the vibrancy of city, town and village centres?
- Will it investigate Information Communication Technology (ICT) links to connect geographically remote and disadvantaged groups to services and resources?

## **9 A transport network which maximises access whilst minimising detrimental impacts. If transport impacts are a significant result of the activity, consider a transport impact assessment**

- Will it provide/improve/promote information about alternatives to car-based transport?
- Will it support more efficient use of cars (eg car sharing)?
- Will it improve access to opportunities and facilities for all groups?
- Will it make the transport/environment attractive to non-car-users (pedestrians, cyclists etc)?
- Will it improve the environmental performance of vehicles?
- Will it encourage freight transfer from road to rail and water?
- Will it reduce the need to travel by increasing access to key resources and services by means other than the car?

## **10 A quality built environment and efficient land use patterns that make good use of derelict sites, minimise travel and promote balanced development**

- Will it improve the resource efficiency of buildings (water, energy, density, use of existing buildings, designing for a longer lifespan)?
- Will it increase the use of sustainable urban drainage to reduce surface water run-off?
- Will it increase safety and security in new buildings and developments?
- Will it ensure new developments are balanced in land usage, providing essential services accessible without use of a car?
- Will it provide sympathetic and appropriate landscaping around new development?

- Will it improve disabled access to the built environment?
- Will it support local distinctiveness?

### **11 Quality housing available to everyone**

- Will it make housing available to people in need (location, type, affordability)?
- Will it enable people to obtain and maintain tenancies?
- Will it improve the quality of the housing stock (increase safety and security, reduce unfit housing)?
- Will it improve the energy efficiency and insulation in housing to reduce fuel poverty and ill-health?
- Will it increase use of sustainable design and sustainable building materials (recycled, locally produced and less polluting materials) in construction?
- Will it reduce the number of empty and difficult to let properties?
- Will it increase the amount of accessible housing and that built to “lifetime standards”?

### **12 A biologically diverse and attractive natural environment. If environmental impacts are a significant result of the activity, consider an environmental impact assessment**

- Will it protect and enhance existing priority habitats and species populations and provide for appropriate long term management of wildlife habitats?
- Will it protect individual features such as hedgerows, drystone walls and ponds?
- Will it increase understanding of ways to create new environmental assets and restore wildlife habitats?
- Will it make use of opportunities to enhance the environment as part of other initiatives?
- Will it increase the quality and quantity of woodland cover in appropriate locations and promote access to wildlife on appropriate sites?
- Will it promote, educate and raise awareness of the enjoyment and benefits of the natural environment and biodiversity?

### **13 Minimal pollution levels. If environmental impacts are a significant result of the activity, consider an environmental impact assessment**

- Will it clean up contaminated land?
- Will it reduce air, water, land, noise and light pollution from current activities, and the potential for such pollution?
- Will it raise awareness about pollution (indoor and outdoor) and its effects?
- Will it provide support, advice and encouragement for the business sector to reduce pollution?
- Will it promote innovative uses of potential pollutants?
- Will it include measures and research to identify and reduce pollution?

### **14 Minimal greenhouse gas emissions and a managed response to the effects of climate change. If environmental impacts are a significant result of the activity, consider an environmental impact assessment**

- Will it reduce greenhouse gas emissions from transport (choice of mode of transport, reducing need to travel, environmentally friendly fuels and technologies)?
- Will it reduce methane emissions from agriculture and landfill?
- Will it reduce the emission of industrial and domestic greenhouse gases?
- Will it increase energy efficiency in all sectors?
- Will it research and monitor the likely effects of climate change and provide advice on the predicted consequences for affected areas and sectors?
- Will it plan for the likely effects of climate change?

## **15 Prudent and efficient use of energy and natural resources with minimal production of waste**

- Will it increase efficiency in water and energy use?
- Will it develop renewable energy/resources?
- Will it make efficient use of land (appropriate density, protect good quality agricultural land, use brownfield sites in preference to greenfield sites)?
- Will it increase re-use, recovery and recycling of waste?
- Will it increase awareness and provide information on resource efficiency and waste?
- Will it reduce use of non-renewable resources?

### **(i) Social Inclusion and Equity across all sectors**

- Has the activity considered different ways to overcome barriers to communication and participation?
- Does the activity consider the needs of disadvantaged and minority groups?
- Does the activity consider the needs of older and younger people?
- Does the activity consider the needs of disabled people?
- Does the activity promote religious and racial understanding?

### **(ii) A partnership and participative approach**

- Has the planning of the activity involved working in partnership and the involvement of affected groups?
- Has the activity enabled less well-resourced groups to take part?
- Has the activity taken steps to consult and involve “difficult to reach” groups?
- Does the management of the activity involve stakeholders?

### **(iii) Geographic adaptation to the needs of rural and urban communities**

- Has the activity taken into account the varying needs of rural and urban communities?

### **(iv) Creativity, innovation and the appropriate use of technology**

- Has the activity taken steps to increase innovation?
- Has the activity taken steps to use technology appropriately?

### Appendix 3: Pedestrian Provision in New Developments

Institute of Highway Technicians (IHT) Guidance indicates that the maximum walking distance to a bus stop should not exceed 400m and preferably not more than 300m. The table below gives a range of acceptable walking distances for a number of common facilities that should be used for planning and evaluation purposes when assessing convenient walking distances to and from new developments. Bus stops should be located to minimise walking distance from a development, but should also maximise potential catchment areas. Research has shown that people are prepared to walk up to 800m to or from a rail station. These distances should be assessed as the route would be walked, not “as the crow flies”.

	<b>TOWN CENTRES</b>	<b>COMMUTING/SCHOOL</b>	<b>ELSEWHERE</b>
DESIRABLE	200M	500M	400M
ACCEPTABLE	400M	1000M	800M
PREFERRED MAXIMUM	800M	2000M	1200M

Source: IHT Guidelines for providing journeys on foot (2001)

## Appendix 4: Air Quality

Clean air is an essential ingredient of a respectable quality of life. People have a right to expect that the air they breathe will not harm them. A local regime of air quality management is now in place which imposes a duty on the local authority to:

1. review the existing air quality against national air quality objectives;
2. establish any areas and sources that are likely to exceed the objectives;
3. declare the areas as Air Quality Management Areas (AQMAs); and
4. produce an Action Plan that sets out measures capable of improving the air pollution within these areas.

AQMAs have been declared in areas of the District and further details available from the air quality management team<sup>1</sup>. There will therefore be implications for new development within these areas. It does not mean that developments that produce significant emissions will be prevented but they will require further consideration.

- New developments should ensure, where practicable, that it meets the basic sustainability principles and does not cause a worsening of the local air quality. Any applicant should have regard to guidance and advice produced by Government<sup>2</sup> :
  - PPG 4 – Industrial and Commercial Development
  - PPG 6 – Town Centres and Retail Development
  - PPG 13 – Transport
  - PPG23 – Planning and Pollution Control
  - MPG 11 – Environmental Effects of Mining and Minerals Extraction.
- The supplementary air quality and land-use planning guidance note should be consulted in the first instance to establish if further assessments will be required<sup>3</sup>. Further assistance will be available through the relevant planning and air quality management officer.
- Not all planning applications will require an air quality assessment and a set of selection criteria are included in the guidance note.
- Any development needs to consider its sources of air pollution and measures to minimise its impact.

<sup>1</sup> <http://www.wakefield.gov.uk>

<sup>2</sup> <http://www.planning.odpm.gov.uk/policy.htm>

<sup>3</sup> The guidance is currently under construction and will be available as soon as possible.

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