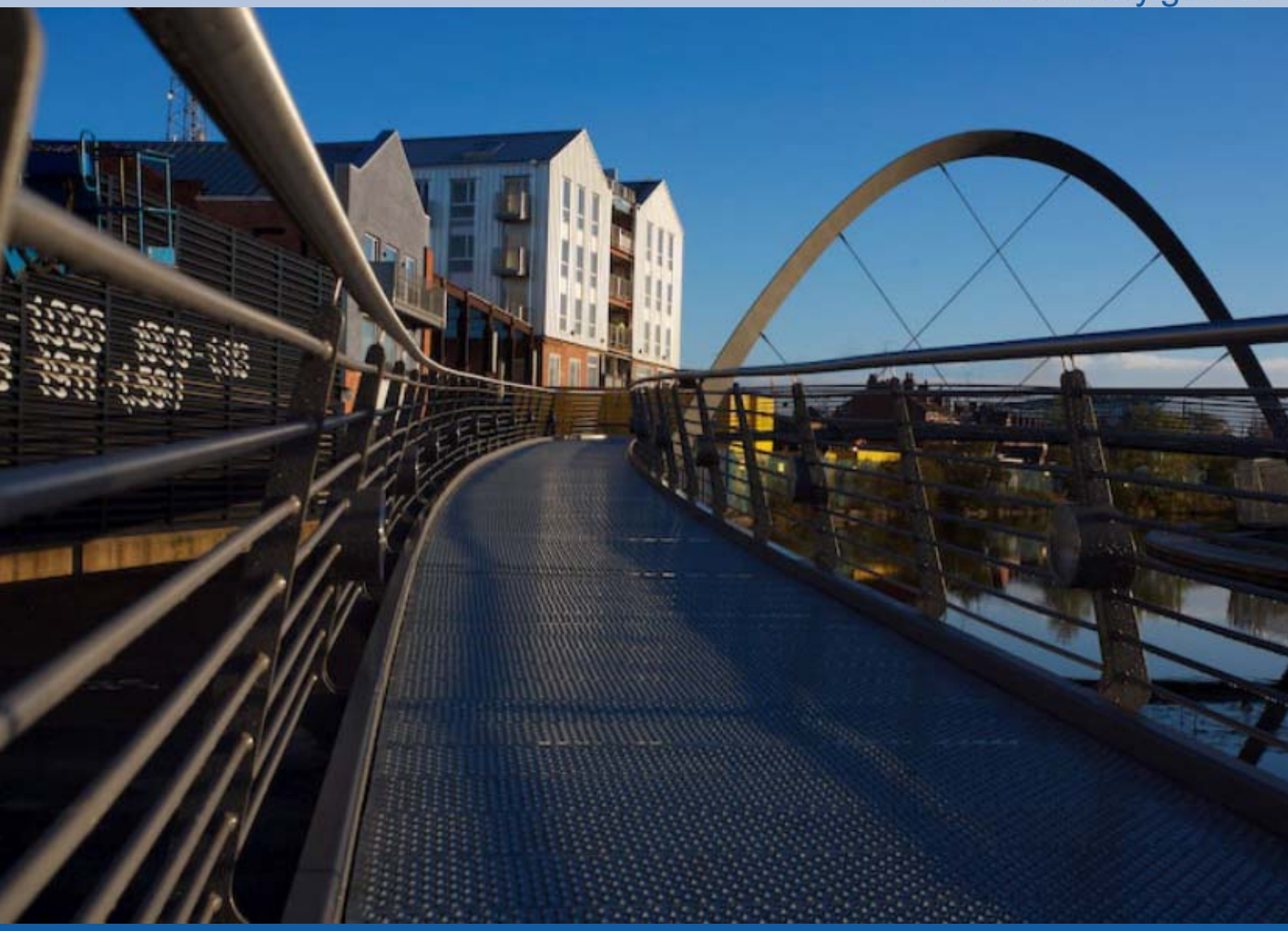

Local Development Framework

Adopted

January 2009

Delivering a More Sustainable City

Supplementary Planning Document (SPD)

Coventry City Council

Contents

1. Overview

Mission

To set out Coventry City Council's commitment to achieve greater levels of sustainable development through the planning process. The purpose of this Supplementary Planning Document (SPD) is to:

1. Explain the implementation of Coventry Development Plan Policy OS4

2. Indicate how sustainability requirements can be met

3. Help those submitting planning applications to determine how the sustainability of their proposals might be improved.

The key aim of this SPD is to increase the overall sustainability of developments. It is important that consideration of sustainability is carried through from policy to implementation on the ground and at an early stage of any major scheme.

What these requirements cover

The definition of major proposals is defined nationally as:

- Residential schemes of **10** or more dwellings or site area greater than **0.5** hectares
- Other development with a site area of **1** hectare or more or where the total floor space is **1,000** square metres or more.

In addition, there are proposals which can be considered to be high impact or large scale, particularly those that are likely to be 'controversial'. These are mainly:

- Applications that are not in line with policies contained in development plans
- Proposed developments where there would be significant environmental impact and/or significant transport implications e.g. new highway infrastructure
- Other proposals where employment land or green space may be lost
- Proposals where there is a potential impact on adjoining Conservation Areas or listed buildings or on sites of national or local sites of ecological interest.

Key requirements

This Supplementary Planning Document is centred on seven key sustainable themes:

- Energy
- Materials
- Contaminated land
- Travel
- Waste and recycling
- Water
- Air quality.

The themes have been selected to align with the West Midlands Sustainability Checklist and link with the components of the Governments Code for Sustainable Homes (2008) and the UK National Sustainable Development Strategy (2005). Against each of these themes, a key requirement has been established which must be met for all large scale and high impact development proposals.

Sustainable developments are achieved through accessible locations and good design which can mitigate the challenges of climate change. Inherent features should include consideration for minimised heat loss or solar gain through appropriate location and orientation of the building, careful selection of components, considerate choices for materials and positioning of glazing. Minimising energy demands can be achieved through passive day-lighting, natural ventilation and shading. Reduced water and drainage demands may be incorporated through Sustainable Urban Drainage (SUDS) and green roofing. Allowing for surface water and green spaces is not only visually appealing but also provides an element of protection in terms of shading, slowing storm water flow rates and reducing urban heat island effects.

Achieving quality design of buildings in the most appropriate locations will help to future-proof new developments in Coventry against climatic changes that are predicted for the coming years and contribute to a mitigation of the causes.

How to use this guide

All major proposals should address each key requirement in tables 2 to 8 in their sustainability assessment and/or as part of their design and access statement.

For all assessments, it is the developer's responsibility to ensure that the correct evidence is provided. Without the evidence, the Council cannot make an informed assessment.

The inclusion of sustainability considerations should start at project inception. Key questions to consider include:

- Has the client been informed about the potential benefits of adopting sustainable design and construction techniques?
- Have strategic sustainability objectives been developed for the site?
- Has the design team got access to the full range of expertise to enable sustainability to be adequately considered?
- How will the sustainability objectives for the development be achieved and what are the monitoring measures?

2. Policy context

2.1. A hierarchy of policy exists and this section will identify the key policy documents influencing this SPD.

European context
- Energy Performance of Buildings Directive, 2006
- The Conservation (Natural Habitats) Regulations 1994

National policy context
- Planning and Compulsory Purchase Act, 2004
- Sustainable and Secure Buildings Act, 2004
- Planning and Energy Act 2008
- U.K National Sustainable Development Strategy, 2005
- Climate Change and Sustainable Energy Act, 2006
- Planning Policy Statement 1: Planning and Climate Change, 2007
- Planning Policy Statement 9: Biodiversity & Geological Conservation 2005

Regional policy context
- West Midlands Regional Spatial Strategy, 2004
- West Midlands Regional Spatial Strategy Phase II Revision Submission Draft, 2007
- West Midlands Regional Sustainability Framework 2006

Local policy context
- Coventry Development Plan, 2001
- Coventry Sustainable Communities Strategy 'Coventry The Next 20 Years' 2008
- Warwickshire, Coventry and Solihull Local Biodiversity Action Plan 2006
- Coventry Green Space Strategy
- Coventry Green Infrastructure Strategy

Regional policy context

2.2. The 2004 West Midlands Regional Spatial Strategy (RSS) is a statutory planning document prepared by the West Midlands Regional Assembly and approved by the Government. It sets out what should happen where and when across the West Midlands region up to 2021.

2.3. The 2006 Phase II Review of the RSS sets out three policies relating to sustainable development. These policies address climate change, creating sustainable communities and design and construction which seek to improve air quality. Please refer to Appendix A for a complete list of the relevant policies which are the Regional Assembly's preferred options.

Local policy context

2.4. Many of the Council's policies and strategies have the achievement of sustainable development as part of their core objectives. This includes the Coventry Development Plan (CDP), which sets the framework for development within the city up to 2011.

2.5. Policy OS1 of the plan identifies three strategic objectives, which include: economic regeneration, social equity and environmental quality. Policy OS4 of the plan relates this aim to the concerns of the planning system and states that:

'***The developing concepts and techniques of sustainability will be applied through policies in this plan to:***

- ***Ensure the efficient use and re-use of land and buildings***
- ***Encourage rational modes and patterns of travel***
- ***Promote the good stewardship of the natural and built environment.***

Sustainability assessments will be required in respect of large-scale or high impact development proposals in order to establish the best practicable mix of land uses and design of developments and relationship to the built and natural environment'.

2.6. Further details regarding the Coventry Development Plan can be found on the Councils website: www.coventry.gov.uk/cdp.

2.7. Planning legislation has been updated under the 2004 Planning and Compulsory Purchase Act. This act requires local planning authorities to prepare a Local Development Framework (or LDF for short). Coventry's LDF is about managing change to secure the best achievable quality of life for all members of the community and working together to achieve agreed objectives in the development and use of land. Further details regarding the Council's developing LDF can be found at: www.coventry.gov.uk/ldf.

Current standards, codes and regulations

Code for Sustainable Homes (2008)

2.8. The code is a new national standard for sustainable design and construction of new homes. By integrating elements of this voluntary code into new homes and obtaining assessments against the code, developers will be able to obtain a 'star rating' for any new home which demonstrates its environmental performance. It provides valuable information to home buyers and offers builders a tool with which to differentiate themselves in sustainability terms. It also involves an independent assessment, which will give new homes a star rating based on their sustainability.

2.9. The code has established a set of sustainable design principles. Homes are assessed as a whole package against the following design categories:

- Energy/CO_2
- Waste
- Materials
- Surface water run-off
- Waste
- Pollution
- Health and well-being
- Management
- Ecology.

Building regulations

2.10. Building regulations establish building and construction standards. There are 13 building regulations of which the conservation of fuel and power is one.

2.11. Part L outlines a number of essential objectives to ensure that regulations are economically feasible, measurable and complementary to the 2007 Energy White Paper objectives and the Energy Performance of Buildings Directive. Obligations under Part L include minimum standards for heating and lighting efficiency, obligations to incorporate fuel saving measures when retrofitting and revised Standard Assessment Procedure (SAP) standards for building efficiency.

BREEAM

2.12. BREEAM (Building Research Establishment's Environmental Assessment Method) is a method of assessment developed by the Building Research Establishment (BRE) to determine the environmental performance of both new and existing buildings. The standard is applicable to the industrial, retail, offices and health. Buildings that fall outside the defined sectors can be examined through a bespoke BREEAM package. Housing is covered separately under the Code for Sustainable Homes or 'EcoHomes'.

2.13. Developments using BREEAM should submit the Pre-Assessment Estimator and methods of assessment. If the scheme intends to achieve an 'excellent' rating, the sustainability checklist that follows is not required. Evidence to verify the achievement of any rating will be required as a condition attached to planning consent.

EcoHomes

2.14. EcoHomes is a version of BREEAM applicable to homes. It has been replaced by the Code for Sustainable Homes for new housing but will continue to be used for refurbishments. A Code for Sustainable Homes rating of 4 is recognised as equivalent to an EcoHomes excellent.

2.15. For schemes that are expected to achieve an excellent rating, the sustainability checklist that follows need not be applied. The pre-assessment estimator should be submitted instead. Evidence to verify the achievement of any rating will be required as a condition attached to planning consent.

Zed Standards

2.16. The innovative design of Zero (fossil) Energy Developments (ZEDs) allows increased densities without sacrificing amenity. ZED standards meet the '21 steps' approach to reducing energy consumption to a point where ZEDs reach the Government's 2050 emissions targets. The 21 steps approach shows the contribution made to reducing energy consumption by each of a series of 21 steps. The steps themselves are a mixture of construction choices.

2.17. Reporting against the 21 steps for the ZED framework can be used in place of the sustainability checklist that follows. Evidence to verify the achievement of the proposed ZED will be required as a condition attached to planning consent.

Code for Sustainable Building (CSB)

2.18. The Sustainable Buildings Task Group published a detailed set of recommendations to ensure that buildings are more sustainable. The

report brings together a range of sustainable building initiatives into one regulatory code for sustainable construction. At present there is no universal code for sustainable non-domestic buildings. Similar to the aims of the Code for Sustainable Homes, there is an aspiration for non-domestic buildings to achieve zero carbon emissions by 2019.

Standard Assessment Procedure

2.19. The Standard Assessment Procedure (SAP) is the most widely used means of assessing the energy efficiency of domestic properties. SAP is measured on a scale of one to 120 – one being very poor, 120 being excellent. A typical SAP for an average house in England would be 45, and a typical SAP rating for a new house should be around 80. The factors that affect SAP rating include location and orientation, the size of the dwelling, fuel type and the hot water system used.

2.20. The 2005 SAP edition is now available to download: www.projects.bre.co.uk/sap2005/

3. Sustainability in Coventry

Sustainability and climate change

3.1. Increased energy, water and running costs for buildings and more demanding regulations mean that it makes good commercial sense to anticipate requirements and aim for best practice and quality sustainable development.

3.2. Building regulations cover some aspects of sustainable building design (in particular energy), and the trend of recent years is for the regulations to become ever more demanding in terms of achieving sustainable design and construction aims.

3.3. This guidance does not aim to duplicate current building regulation requirements. However, choosing to do so, aspiring to emerging trends in good practice and looking for site specific opportunities can help 'future proof' a building and ensure that it meets the rising standards occupiers will come to expect for many years to come. It is therefore important that new built development should meet sustainability requirements as set out in section 4 of this document.

3.4. To re-affirm its position on climate change, the government has made its own pledge to cut carbon dioxide emissions. The draft 2007 Climate Change Bill sets a specific target to make a 80% cut in CO_2 emissions by 2050, based on 1990 levels. Greenhouse gas emissions and CO_2 in particular, are believed to be the biggest cause of global climate change and are largely created by burning fossil fuels.

Wider sustainability issues

3.5. The Sustainability Appraisal Scoping Report of the Local Development Framework (LDF) for Coventry identifies 20 sustainability objectives, which have been derived from the five key government principles on sustainable development. Table 1 illustrates the links between national and local sustainability objectives. These objectives provide a template for the preparation of plans for the city and also a framework for the assessment of individual proposals. The pursuit of sustainable development does not end with the sustainability of policies and allocations, as it needs to be translated into action on the ground.

Table 1:

National Government Sustainability Principles	**Coventry City Council's Sustainability Objectives**
Living within environmental limits	• To protect and enhance landscapes, open spaces and the historic environment
	• To protect and enhance biodiversity
	• To reduce travel by car and air
	• To reduce pollution and waste generation and increase levels of reuse and recycling
	• To minimise use of water, minerals and other natural resources
	• Minimise and manage the risk of flooding and impacts of climate change
	• Enhance quality and minimise air, soil, water, light and noise pollution levels
Ensuring a strong, healthy and just society.	• Provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs
	• Improve accessibility to and use of basic goods, services and amenities to all residents
	• Reduce social exclusion and poverty
	• Improve health and reduce health inequalities and promote active living
	• To reduce crime, disorder and fear of crime
	• To encourage increased cultural and recreational activities across all sectors of the community
Achieving a sustainable economy	• To meet local needs locally
	• To improve Coventry's economy through developing a successful and diverse modern economy
	• To ensure access to good quality employment opportunities for all
	• Good education and training opportunities for all
Promoting good governance	• Enable vibrant and inclusive communities that participate in decision-making
	• Promote a high quality built environment by improving design and layout and encourage local distinctiveness and stewardship of local environments
Using sound science responsibly	• To minimise greenhouse gas emissions and energy use and increase energy efficiency and the proportion of energy generated from renewable sources

Sustainability assessments for large scale or high impact developments

3.6. Applicants will need to undertake a sustainability assessment at the pre-application stage. The assessment should be carried out by the applicant and submitted with the planning application as part of the design and access statement.

3.7. The design and access statement should set out how the development will contribute to greater levels of sustainability. The key questions in section 4 act as a prompt for this, to help ensure all relevant issues are covered when preparing a high impact or large scale proposal.

3.8. The sustainability assessment should clearly demonstrate and be supported by evidence, to show how the scheme will meet the key requirements as set out in Tables 2-8.

3.9. Where it is claimed that such a requirement would be non-viable in relation to a particular proposal, it is expected that this will be evidenced.

3.10. The national definition of major developments has been adopted:

- Residential schemes of **10** or more dwellings or site area greater than **0.5** hectares
- Other development with a site area of **1** ha or more or where the total floor space is **1,000** square metres or more.

3.11. There are, however, proposals, which can be considered to be high impact or large scale, particularly those that are likely to be 'controversial'. These are mainly:

- Proposals that are not in line with policies contained in development plans
- Developments where there would be significant environmental impact and/or significant transport implications
- Other proposals where employment land or green space may be lost
- Proposals where there is a potential impact on adjoining Conservation Areas or listed buildings or on sites of national or local sites of ecological interest.

It is expected that a sustainability assessment will accompany such proposals with the design and access statement.

Advantages of incorporating sustainable techniques into development schemes

3.12. It is important when assessing the economic benefits of a scheme based on the principles of sustainability to consider the 'whole life costing' implications of the scheme. In some cases it may be that the initial costs of a sustainable scheme may be higher than those of a conventional scheme.

3.13. Where a scheme is based on sustainability principles, it may offer the developer one or more the following advantages:

- The image of the development, or the client, the developer or the designer may be enhanced through association with the development of a sustainable scheme
- Customers may be attracted to a commercial development where publicity can be given to its sustainability
- The running costs of a development may be reduced. This may include reduced heating or lighting costs, lower capital costs, or an extended cycle for the renewal of the development
- It may attract higher rental, or a higher sale price
- They may be better able to anticipate future user and legislative requirements, thus reducing future adaptation costs
- The perception of the local community is likely to be more favourable when features of sustainable design and construction are incorporated.

4. Achieving greater sustainability/mitigating climate change in buildings

Coventry context

4.1. Coventry City Council signed the Nottingham Declaration on Climate Change in October 2006. A strategy for tackling climate change in Coventry has been developed and approved by the Council and the Coventry Partnership.

4.2. On 17 January 2006, the Council passed a motion pledging that it will:

'Work to ensure that where possible, all new build (domestic, commercial and retail) approved after January 2008 will have a percentage of its energy needs generated from renewable sources and have recycling provision built into each design'.

Policy OS4 of the Coventry Development Plan 2001 expressly states:

'***The developing concepts and techniques of sustainability will be applied through policies in this plan to:***

- ***Ensure the efficient use and re-use of land and buildings***
- ***Encourage rational modes and patterns of travel***
- ***Promote the good stewardship of the natural and built environment.***

Sustainability assessments will be required in respect of large-scale or high impact development proposals in order to establish the best practicable mix of land uses and design of developments and relationship to the built and natural environment'.

4.3. This SPD provides further articulation of ways of delivering the policy framework and provides a consistent basis on which to assess proposals and to assist the applicant in interpretation of the policy requirements. This SPD shows how greater levels of sustainability can be achieved in developments. It is about achieving social, environmental and economic objectives at the same time, and not at the expense of each other.

4.4. This section has been developed in accordance with local, regional and national planning policy ensuring that this SPD is a material consideration that will be given weight in considering development proposals. It can be used to inform planning conditions and/or obligations. These include RSS policies SR1, SR2, SR3 and SR4 which relate to climate change, creating sustainable communities and sustainable design and construction and improving air quality for sensitive ecosystems respectively.

West Midlands sustainability checklist

4.5. The West Midlands sustainability checklist has been developed by West Midlands Regional Assembly, Advantage West Midlands with the help of the Building Research Establishment, and support of the Department of Local Communities and Local Government, World Wildlife Fund, West Midlands Building Technology Cluster, West Midlands Regional Planning Officers Group, and Sustainability West Midlands.

4.6. As regional planning body, the West Midlands Regional Assembly commends the use of the sustainability checklist as a useful tool for developers particularly for major applications where a strategic environmental assessment is not required, in addressing sustainability issues such as climate change, and a key implementation tool for the revised Regional Spatial Strategy. The Council's SPD builds upon the regional checklist and applies a bespoke set of requirements that relate to Coventry's corporate aims and objectives.

4.7. Various Council documents have been published to address the issues of mix of uses and tenures, housing quality, designing places to reduce crime, inclusive design, access to local amenities, community and quality design and layout. The documents include, the 2004 Urban Design Guidance, the Housing Strategy Update 2005, and the Affordable Housing SPG which addresses mix of uses and tenures and housing quality and the Statement of Community Involvement, 2006.

4.8. The matrix below identifies the relationship between the West Midlands sustainability checklist and this SPD.

		West Midlands Sustainability Checklist themes							
		Climate Change	**Community**	**Place Making**	**Transport**	**Ecology**	**Resources**	**Business**	**Buildings**
SPD themes	**Energy**	✓	✓	✓	✓	✓	✓	✓	✓
	Materials	✓	✓	o	✓	✓	✓	✓	✓
	Contaminated land	✓	✓	✓	✓	✓	✓	✓	✓
	Travel	✓	✓	✓	✓	✓	✓	✓	✓
	Waste and recycling	✓	✓	o	✓	✓	✓	✓	✓
	Water	✓	✓	✓	✓	✓	✓	✓	✓
	Air quality	✓	✓	o	✓	✓	✓	✓	✓
Key	✓	Compatible			×		possible conflict	o	neutral

Addressing the key requirements

4.9. Tables 2-8 contain information on the seven key themes for sustainable design and construction, following the structure of the checklist where appropriate. In particular, they identify key requirements which applicants should address when developing their proposals. In addition, they provide background information on these key requirements. In some cases, CDP saved policies are referred to. Additional detailed information and guidance will be provided in a set of supporting documents. These are detailed in section 6.

Table 2

Energy

Key requirement: In all major developments, a minimum of 10% of the development's energy requirements should be provided through the on-site generation of renewable energy.

Aim

⇒ To reduce overall energy use and maximise potential for renewable energy to reduce the city's carbon footprint.

Policy context overview

National:

⇒ PPS1 supplement: Planning and climate change suggests a target percentage of the energy to be used in new development to come from decentralised and renewable or low-carbon energy sources. The target should avoid prescription on technologies and be flexible in how carbon savings from local energy supplies are to be secured.

⇒ PPS22: Renewable Energy recommends setting out criteria that will be applied in assessing applications for planning permission for renewable energy projects.

Regional:

⇒ Policies EN1 and EN2 of the 2004 RSS for the West Midlands state that Local Authorities encourage proposals for renewable energy and minimise energy demands from new developments whilst encouraging the use of combined heat and power systems.

⇒ The West Midlands Regional Energy Strategy 2004 sets out numerous targets against four key objectives.

Relevant facts

⇒ The Local Government Association estimate that households in the UK produce 27% of UK's carbon dioxide emissions, and improving efficiency will act to combat this. For example, homes built to BREEAM 'very good' standard reduce carbon dioxide emissions by 32%.

⇒ Typical energy costs per household per year are currently approximately £850. Therefore at current development rates, if every household development was provided with 10% on-site renewable energy, this would have a market value of £12,750 per year.

⇒ Key to the field of energy production is the increasing need to produce it from renewable sources rather than limited fossil fuels. Many power companies are now using renewable sources (wind, hydro, solar, geo-thermal) and making it available to their customers.

Tools

⇒ BREEAM: Energy consumption for buildings in the retail sector is assessed fewer than 21 different energy criteria ranging from the energy efficiency of installed appliances to efficiency ratings for internal transport structures (lifts).

⇒ SAP & SBEM ratings for housing and commercial development.

⇒ Sustainable Energy By Design – A Guide for Sustainable Communities.
www.tcpa.org.uk/downloads/TCPA_SustEnergy.pdf

Evidence

⇒ Businesses can benefit from schemes aimed at promoting energy efficiency and stimulating the take-up of renewable sources of energy, e.g. solar and wind power.

⇒ Coventry's Local Area Agreement sets out a commitment to reduce the carbon dioxide emissions produced by Coventry City Council and the wider community.

⇒ The Home Energy Conservation Act (1995) places a duty on Coventry City Council to secure a significant improvement in domestic energy efficiency across all housing tenures. The Council takes these obligations seriously and has developed a range of initiatives in partnership with other organisations aimed at assisting householders to live affordably in warmer homes.

Table 2

Energy

Key considerations

⇒ **Air conditioning:** If required, a low energy system or alternative technology system should be used to minimise conventionally powered energy demand.

⇒ **Combined Heat and Power (CHP):** Where power generators are accessible to the developer, the wasted heat from power generation can be used directly for space and water heating.

⇒ **Emissions:** Carbon and greenhouse gas emissions reduction is vital. 'Future proofing' building through new technologies and co-locating energy users to facilitate development of low carbon networks should also be considered.

⇒ **Improved levels of insulation:** Including insulation of walls, floors, roofs, doors, windows, and window frames. Windows should be double glazed, or even treble glazed, and low emissivity glass can also be used to reduce heat loss. Timber window frames have better thermal efficiency than do steel or aluminum.

⇒ **Natural lighting:** Ensuring that window size, and outlook provide adequate natural lighting for the rooms that they serve. A floor plan depth of no more than 13 metres can provide a reasonable degree of natural daylight if there are windows along both sides. Roof lights can be used to light single storey buildings, of the top floors of buildings.

⇒ **Natural ventilation:** Including windows that can be opened, to provide natural and easily controlled ventilation. This may cut down on the need for air conditioning, which is expensive in terms of the energy it consumes.

⇒ **Solar power:** Use of photovoltaic cells to generate electricity or active south facing roof slopes for water heating.

⇒ **Thermal buffering:** Conservatories, garages and greenhouses can be attached to the outside wall of heated rooms in buildings

⇒ **Trees:** Retention of existing and planting new trees can reduce cooling costs in summer and heating costs in winter. Careful consideration of siting could take advantage of natural topography and microclimates to reduce energy consumption.

⇒ **Windows:** The appropriate use of single, double or triple glazing depending on the heating system of the building.

⇒ **Electrical fittings:** Energy saving devices such as low energy light bulbs, light sensors and AAA rated appliances can reduce the overall demand.

Key questions

1. How will natural heating, cooling, daylight and ventilation be used in the development?
2. How will the design incorporate the use of energy from renewable sources?
3. What measures have been built into the scheme for passive solar gain including the use of the photovoltaic?
4. Does the building incorporate Building Energy Management System (BEMS) for its heating, lighting and ventilation system in order to save energy and minimise the 'Urban Heat Island' effect?
5. How will the potential for using district heating or combined heat and power (CHP), including the potential to share such a plant with others in the area?
6. Have will solar, wind or photovoltaic energy generation be incorporated into the design?
7. How will the assessment of the energy running costs of the development against the costs of up front investment in energy conservation be carried out?

Table 3

Materials

Key requirements: In all major developments, it should be demonstrated that maximum use is being made of reclaimed materials, or recycled materials (such as aggregates) for construction.

Aim

⇒ Maximise the use of recycled and reclaimed materials from sustainable sources.

Policy context overview

National:

⇒ The government's strategy for more sustainable construction - Building a Better Quality of Life promotes the Eco Management and Audit Scheme (EMAS) and ISO 14001 that for companies involved in development and construction includes the use of sustainable materials. The government has also commissioned the Building Research Establishment to produce the Green Guide to Specification, which provides a systematic assessment of the environmental impacts and benefits of all types of building elements.

Regional:

⇒ Policy M3 of the 2004 RSS for the West Midlands states that plans should increase the contribution of alternative sources of material, including adopting methods of operations that will assist reuse and recycling in construction projects.

Local:

⇒ CDP Policy BE2 states that a high quality urban design will be promoted by the following of design principles that include ensuring that developments are sustainable in terms of their design, layout and density and encouraging developments which can adapt to changing social, technological, and economic and market conditions.

Relevant facts

⇒ The Local Government Association (2006) estimate that the construction sector uses over 420 million tonnes of material resources each year. Annually, 90 million tonnes of construction and demolition waste is generated – the industry produces three times the waste produced by all UK households combined, and only half the waste is being recycled back into the sector.

⇒ Approximately 13 million tones of construction waste is material delivered to sites but never used.

⇒ Homes built to EcoHomes 'very good' reduce waste sent to landfill by 25%.

⇒ The use of site waste management plans is often cost saving, while good practice levels of recycled content in construction are cost-neutral or cost saving.

Tools

⇒ Building Research Establishment (BRE) has developed an environmental profiles website which provides reliable and independent information about building materials and components: www.bre.co.uk

⇒ Timber Recycling Information Centre www.recycle-it.org

⇒ Coventry City Council's Urban Design SPG (2004) www.coventry.gov.uk/ccm/navigation/environment/planning/urban-design/

⇒ Waste and Resources Action Programme (WRAP) www.wrap.org.uk/

Evidence

⇒ A recent survey by the Commission for Architecture and the Built Environment (CABE) and the World Wildlife Fund showed that 87% of homebuyers want to know whether their homes are environmentally friendly and 84% would be prepared to pay more for an eco-friendly home.

⇒ Construction in the UK uses 60% of all softwood and 44% of hard wood timber, most of which is from unmanaged sources world-wide. Construction materials and energy use in buildings accounts for 50% of all energy consumption in the UK and construction accounts for 90% of mined aggregates.

Table 3

Materials

Key considerations

⇒ **Green roofs:** Green and living roofs are layers of vegetation that sit on top of a conventional roof surface. They offer a very wide range of environmental and economic benefits, in particular their insulation and cooling properties, ability to significantly reduce rainwater runoff from roofs, and their value in promoting biodiversity and habitat in built-up areas. Green roofs have come to be significant elements of sustainable and green construction. They are often highly visible, signal intent for sustainable building and can give a very positive and distinctive image to a building or development.

⇒ **Minimise the environmental impacts of transport for building materials:** Materials should be selected in such a way that overall transport costs are minimised. This includes all aspects of transport, from the collection of raw material, to delivery to the building site.

⇒ **Paints:** Low emission or water based breathable paints for woodwork give better conditions for the protection of timber, rather than sealed oil based paints which create an impermeable barrier. Timber stain provides a similar breathable surface finish.

⇒ **Re use of buildings:** The conservation of existing building materials can be extended to the re use of a building, in preference to a redevelopment solution. In such cases, consideration will need to be given to the need to improve the energy efficiency of the building and to the possible need to remove hazardous materials such as asbestos.

⇒ **Use of materials, which are capable of future recycling:** The selection of materials can be influenced by consideration of the possibility of future recycling, at the end of the useful life of the development. For this reason materials should be capable of being separated for re-use. Lime mortar, for example, can be recycled, whereas cement mortar cannot.

⇒ **Use of secondary aggregates:** Consideration should be given to use of recycled building materials, either from demolished buildings, which occupied the site, or from used building materials. If materials from demolished buildings on site cannot be utilised, then they should as far as possible be disposed to a building materials supplier for use elsewhere.

⇒ **Use locally* sourced materials:** Wherever possible and responsibly sourced timber. (* from within which the majority of your materials will travel to be used on site. The area that you define as **local** is important for public perception of 'locally sourced').

Key questions

1. How will the materials be specified to help maintain local character and ensure long life?
2. Will materials be specified to ensure low environmental impact and to maintain good internal air quality?
3. Will plastics be avoided where an alternative is available?
4. Are the materials specified derived from local sources?
5. Are there any materials, including those to be used for surfacing, which in their life cycle, produce harmful emissions?
6. Will materials be specified to ensure low environmental impact and to maintain good internal air quality?

Table 4

Contaminated land

Key requirement: All major developments must ensure no adverse impacts on human health and water quality are caused during the construction or use of the development.

Aim

⇒ Minimise polluting emissions to soil, surface water and groundwater and be protect human health.

Policy context overview

National:

⇒ Planning Policy Guidance: 23 Planning and Pollution Control provides guidance on how to minimise pollution risks in new development.

⇒ The Environment Agency produces a range of pollution prevention guidance notes including some specific to construction.

Regional:

⇒ Policy QE2 of the 2004 RSS for the West Midlands deals with restoring degraded areas and managing and creating high quality new environments.

Local:

⇒ CDP Policy EM3 states that development will not be permitted where likely damage to water resources and its ecology.

⇒ CDP Policy EM5 states that proposals resulting in pollution will only be permitted if the health, safety and amenity of users of the site or neighbouring sites can be assured.

⇒ CDP Policy EM6 states that development on or adjacent to contaminated land will be permitted only if any measures for remediation and protection required to ensure the health and safety of the development proposed and its users are identified and implemented

Relevant facts

⇒ Living on or near areas of contaminated land can lead to adverse human health effects and impact water resources and ecosystems. Landfill gases have the potential to affect health and damage or destroy property.

⇒ All local authorities have a duty, under Part IIA of the Environmental Protection Act 1990 to investigate their area for contaminated land. The Council has identified 2,685 areas of potentially contaminated land in the city and is required to investigate and remediate their potential human health and environmental impacts.

⇒ The government has set a target of achieving 60% of all new developments on brownfield land.

Tools

⇒ Coventry City Council Contaminated Land Strategy, DEFRA CLR and CLEA documents, DEFRA Circular 01/2006 and Contaminated Land Regulations.

⇒ Environmental protection provides advice on carrying out contaminated land investigations and remediation. Leaflets relating to land quality information and advice on risk assessments are available from the contaminated land section of the City Council website.

EVIDENCE

⇒ Parliamentary Office of Science and Technology referred to expert estimates of 537 sites nationally that have been formally determined as contaminated land since 2001.

⇒ National government targets require 60% of all new developments to be constructed on brownfield sites.

⇒ Parliamentary Office of Science and Technology referred to expert estimates of between 50,000 and 100,000 potentially contaminated sites across the UK, with estimates of the extent of land ranging between 100,000 and 200,000 hectares.

Contaminated land

Key considerations

⇒ **Biodiversity:** Protecting and enhancing biodiversity, which can achieve the added benefits to amenity value that rich biodiversity encourages. At least 10 metre wide wildlife corridors should normally be provided adjacent to watercourses.

⇒ **Conservation of topsoil:** Topsoil is a valuable resource, which can be carefully collected and set on one side for subsequent reuse either for the development of the site or for use on a nearby site.

⇒ **Health impacts of climate change:** Climate change scenarios provide us with an idea of how the climate and our weather will look in years to come. The long term trends (climate) are for warmer, drier summers and milder, wetter winters. Accompanying these slower changes will be extreme weather events: storms, floods and heatwaves. A range of health impacts is predicted, including stress arising from heatwaves and flooding and respiratory problems from poorer air quality. In urban areas the effects of heat and heatwaves in particular, are exacerbated by the urban heat island phenomenon, which means that even in a compact city like Coventry, the temperature in the densely built up centre may be up to 6 degrees centigrade warmer than the outskirts of the city.

⇒ **Light pollution:** Ensuring that light pollution is minimised, both from the point of view of wasted energy, and in the interests of wildlife and a natural environment. Consideration of solar powered lighting, where appropriate.

⇒ **Site knowledge:** Undertake sufficient contaminated land investigation to allow a conceptual model, risk assessment and remediation method statement to be produced in line with appropriate guidance, to ensure the development is protective of human health and the environment.

⇒ **Treating contamination on site:** Suitable measures to treat contamination sustainably, if possible on site, so as to enable development of the land to take place.

Key questions

1. How will noise from adjoining or adjacent sources of noise such as transport links be minimised for the residents of proposed residential developments by development design, or site layout?
2. How will noise, light and air pollution, including dust, be minimised during construction?
3. How will the development clean up any contamination on site and/or avoid land contamination in future?
4. How will the development impact on external air quality?
5. Will noise pollution be minimised within the development and from external sources?
6. How will light pollution be minimised in and around the development?
7. Will it be financially viable to remediate the land to the required standard to protect against both human health concerns, and a risk of contamination to the underlying groundwater or nearby watercourse?

Table 5

Travel

Key requirement: All major developments will meet the BREEAM EcoHomes assessment standard for walking distances to key services and local amenities*.

Aim

⇒ Maximise the use of sustainable modes of travel.

Policy context overview

National:

⇒ Planning Policy Guidance Note 13 Transport introduces national maximum parking standards for broad uses and requires local authorities to adopt development briefs for key accessibility sites.

Regional:

⇒ Policy T2 of the 2004 RSS for the West Midlands encourages reducing the need to travel, especially by car and to reduce the length of journeys.

Local:

⇒ CDP Policy AM3 states that major new developments must facilitate the provision of safe, convenient and efficient bus services. CDP Policy AM9 states that convenient pedestrian routes must be incorporated in the design of new developments.

⇒ CDP Policy AM10 states that developers will be expected to incorporate or fund traffic calming measures where development produces traffic movements, which might have a harmful effect on road safety or environmental quality.

⇒ CDP Policy AM12 states that convenient cycle routes must be incorporated into the design of new developments. CDP Policy AM22 states that new developments will be required to have safe and appropriate access to the highway system.

Relevant Facts

⇒ The overall proportion of people cycling into the city centre has remained relatively similar over the past four years. However, the number of people walking into the city centre has risen by 10% over the same period from 10,385 to 11,446. It is hoped that further improvements to walking and cycling routes, such as Hill Street pedestrian and cycle bridge will help boost levels of walking and cycling even higher.

Tools

⇒ West Midlands Local Transport Plan (2006): www.westmidlandsltp.gov.uk/

⇒ Coventry City Council's Transport Programme (2006): www.coventry.gov.uk/ccm/navigation/transport-and-streets/public-transport/local-transport-plan/

⇒ * Defined as: within 500m of a local centre and post box, within 1,000m of five other amenities from a list of eleven (using safe pedestrian routes). These include: postal facility, food shop, bank/cash point, pharmacy, primary school, medical centre, leisure centre, community centre, place of worship, public house, children's play area and outdoor open access public area. This is taken from the BREAAM Eco Homes Assessment Standard.

Evidence

⇒ The 2001 census data shows that 16% of the Coventry workforce live in households without a car.

⇒ In 2005, the inbound modes of travel for Coventry during 7.30-9.30 am is 19% by bus, 3% rail and 78% private car.

⇒ Average car use generates over three tonnes of CO2 emissions a year, equivalent to approximately a third of the household generated CO2.

Table 5

Travel

Additional approaches

⇒ **Designing for pedestrians:** Ensuring that the general layout of the development is designed with the needs of pedestrians in mind, for example including attractive, direct, safe, easy to use and secure footpaths for all users in the community, where building entrances are well related to such paths and show how such routes connect with pedestrian routes outside the site. Developments should be positioned so that their entrances are as near to bus stops or stations as they are to car parks. Pedestrian routes should be well integrated with and recognised as part of the public transport system

⇒ **Designing for cyclists:** Ensuring that the general layout of the development caters for the specific needs of cyclists, including for example convenient and secure cycle parking facilities, cycle lanes. Cycle parking facilities are key at railway stations and bus interchanges to assist in the integration of transport modes

⇒ **Public transport provision:** Where a developer provides a subsidy to an operator to address any lack of accessibility by bus.

⇒ **Travel Plans:** Where a developer and or an employer occupying a development prepares a travel plan to demonstrate that there is a real choice for employees, which defines the mode of transport to work, which defines the mode of transport to and from the site, or where the development of a school requires a travel plan, which defines the mode of transport to and from the school by pupils.

⇒ **Car sharing schemes:** Providing a car sharing service for a development or an area reducing the need for individual private car ownership.

⇒ **Car parking provision:** By reducing the provision of car parking places, or by providing car free developments, car dependency can be reduced but it is recognised that a balance must be struck to ensure the amenity and parking provision of existing areas are not negatively compounded by this strategy.

Key questions

1. Does the scheme meet the access and movement needs of disabled people in all respects? If not, why?
2. How will the distinction between the local and the strategic network be made if the transport assessment identifies a significant impact?
3. Is the proposed development served by public transport or is its reliance predominately on private car usage?
4. Is there further scope for reducing hard surfacing areas for vehicular movement?
5. How does the proposed development integrate with the public transport network?
6. What measures have been incorporated in to encourage cycling and pedestrian modes of travel?
7. Does the proposed development increase traffic generation unacceptably and if so, can the impact be mitigated to an acceptable environmental level?
8. Does the proposed traffic plan make the most of available green corridor and/or river corridors for transport linkages?

Table 6

Waste and recycling

Key requirement: All major developments must make provision for the discreet storing of recycling and waste storage bins. Space for bins/boxes awaiting collection should be provided within the development and not on the footway to prevent physical obstruction and pollution of the waterway from windblow, seepage and run off.

Aim

⇒ Minimise waste and maximise reuse and recycling both during construction and after occupation.

Policy context overview

National:

⇒ The UK Waste Strategy sets out the government's vision for waste management, including a target for local authorities to recycle at least 33% of municipal waste by 2015. Current planning policy on waste is outlined in Planning Policy Statement 10: Planning for Sustainable Waste Management.

⇒ MPS1 outlines the government's aim of replacing 25% of primary aggregate with reused or recycled waste material by 2016.

Regional:

⇒ Policy WD1 of the 2004 RSS for the West Midlands sets targets to recover value from 45% of municipal waste by 2010 and to recycle or compost 30% of household waste by 2010.

Local:

⇒ CDP Policy EM10 encourages facilities for the re-use and recycling of waste materials.

⇒ CDP Policy EM11 states that sites for materials recycling facilities should be located in sites for industrial purposes.

Relevant facts

⇒ The Local Government Association (2006) estimate that household waste accounts for about 9% (30.1 million tonnes) of the waste produced annually in the UK. While around half of household waste is reusable, only 18% of household waste is recycled - 72% is sent to landfill.

⇒ Coventry has successfully met its national recycling targets for 2003 - 2006 and waste disposal infrastructure is already meeting the landfill diversion targets set by government for the years 2010, 2013, and 2020. The estimated recycling performance for the second quarter of 2006/07 shows the Council is already achieving a recycling rate of approximately 25% well in excess of its next statutory target.

Tools

⇒ Coventry City Council in partnership with Waste and Resources Action Programme (WRAP) provides compost bins to residents at a discounted rate. For further information about composting, visit the Composting Association's website: www.compost.org.uk/ and www.wrap.org.uk/

⇒ Good practice can be found on the Henry Doubleday Research Association (HDRA) for organic growing. Further information on organic gardening can be found at: www.gardenorganic.org.uk/index.php

⇒ Coventry City Council provides kerbside collections of paper and garden waste.

⇒ Coventry City Council provides both domestic and commercial waste management solutions.

Evidence

⇒ Nationally, manufacture of construction materials generates an estimated 12 million tonnes of waste per annum, while an additional 30 million tonnes of excavated soil and clay arise from construction site preparation.

⇒ On a construction site, as much as 20% of materials can be wasted. Burning surplus materials is common practice that is wasteful and causes pollution and smoke nuisance that can lead to prosecution.

Waste and recycling

Key considerations

⇒ **Composting:** Where possible composting facilities should be provided. Waste and recycling bins should be provided on site, during construction.

⇒ **Conservation of topsoil:** Topsoil is a valuable resource, which can be carefully collected, and set on one side for subsequent re use either for the development site or for use on a nearby site.

⇒ **Storage facilities for recyclable waste:** This includes providing sufficient facilities and enough space for composting organic waste, and for storage of other materials, which can be recycled (e.g. glass, metal and paper).

Key questions

1. How will the development provide space or facilities for separate collection of all materials that can be recycled during and after construction?
2. How will the development re-use demolition, construction or other reclaimed waste on or close to the site and/or from elsewhere?
3. How will waste of new construction materials be minimised during construction?
4. Is the scheme designed to minimise the import and export of materials for its construction and subsequent operation?
5. Will the development provide opportunities/facilities for composting activities?
6. How will facilities be established for the separation of waste materials for recycling or re-use on site?

Table 7

Water

Key requirement: All major developments must apply the Construction Industry Research and Information Association (CIRIA) guidance on Sustainable Drainage Systems (SUDS).

Aim

⇒ Conserve water resources, enhance water quality, incorporate water sensitive design and minimise vulnerability to flooding.

Policy context overview

National:

⇒ Planning Policy Guidance 25: Development and Flood Risk, discourages all future development in vulnerable areas such as river flood plains and exposed low-lying sections of coastline.

⇒ Part H of the building regulations was amended in 2002 to encourage and provide guidance on the incorporation of sustainable drainage approaches.

Regional:

⇒ Policy QE9 of the 2004 RSS for the West Midlands states that development that poses an unacceptable risk to the quality of ground/surface water should be avoided.

Local:

⇒ CDP Policy EM3 states that proposals capable of reducing the amount of water in watercourses and ponds or damaging the quality and ecology of the water environment will only be permitted if the risk is kept to an acceptable level.

⇒ CDP Policy EM4 states that development should be designed and located to minimise the risk of flooding.

Relevant Facts

⇒ The Local Government Association (2006) estimate that more efficient household appliances can use a quarter less water, while rainwater harvesting and grey water recycling can produce further savings.

⇒ Introducing basic water efficiencies into metered homes could save homeowners £55 a year in water bills without changing their lifestyles. Homes built to EcoHomes 'very good' can cut water use by 39%. Given that the average Coventry household uses approximately 125 litres of water per day, if all new developments were built to 'very good', water savings would be over 3 billion litres per year.

Tools

⇒ The Environment Agency provides guidance on implementing Sustainable Urban Drainage Systems (SUDS).

⇒ The Environment Agency's website contains detailed maps of areas of coast and river valleys that are vulnerable to inundation, and should be consulted to assess the flood risk on the proposed development site.

⇒ The Councils website shows the results of its Strategic Flood Risk Assessment (Level 1). www.coventry.gov.uk/ldf

Evidence

⇒ The UK Climate Impacts Programme (UKCIP) has forecast that over this century global warming will lead to significant changes in rainfall distribution and intensity. In the West Midlands, it predicts increased demand for irrigation because of drier soils - possibly up by 23% by the 2020s.

⇒ Householders in the UK use around 40% of all water consumed.

⇒ About 30% of the total amount of water used in a typical household is waste water.

⇒ Individual flood risk assessments will be required for development in flood risk areas identified by the Environment Agency.

Water

Key considerations

⇒ **Biodiversity Action Plan:** Please refer to the link: www.warwickshire.gov.uk/

⇒ **Green buildings:** Consideration can be given to clothing the walls and roof with vegetation where appropriate. This can reduce heat loss, and also provide useful wildlife habitat. Green roofs can reduce rainwater run off. Vertical reed beds can be used on walls, to provide 'grey' to 'green' water treatment.

⇒ **Monobloc mixer taps:** Are designed to operate efficiently and can reduce the amount of water use.

⇒ **Paving:** Need for retaining and incorporating more soft permeable surfaces, for example, front gardens.

⇒ **Sustainable Drainage Systems (SUDS):** Includes long term environmental and social factors in decisions about drainage. It takes account of the quantity and quality of runoff, and the amenity value of surface water in the urban environment. SUDS are made up of one or more structures built to manage surface water runoff. They are used in conjunction with good management of the site, to prevent flooding and pollution. There are five general methods of control:

- Prevention
- Filter strips and swales
- Permeable surfaces and filter drains
- Infiltration devices
- Basins and ponds.

⇒ **Rainwater harvesting systems:** Can be installed in both new and existing buildings, and the resulting water used for all purposes except drinking. Rainwater harvesting and can provide up to 100m^3 per annum from a medium sized area and can be used to flush the toilet, water gardens and even fuel the washing machine.

Key questions

1. How will the potential for biodiversity improvements associated with any development be maximised?
2. How will mains water be conserved and discharges of waste water into the main drainage system be minimised?
3. How does your proposed development incorporate measures to reduce water use, conserve water supply and quality (rainwater harvesting systems, sustainable urban drainage systems)?
4. How will discharges of polluted waters be minimised?
5. Does the scheme provide for grey water use, utilise the site potential for water conservation and its disposal through landscaping and swales treatment?

Table 8

Air quality

Key requirement: All major developments must aim to minimise the exposure of the public to harmful air pollutants.

Aim

⇒ To minimise the exposure of the public to air pollutants and to reduce the contribution to atmospheric pollution from activities within the built environment.

Policy context overview

National:

⇒ Planning Policy Statement 23: Planning and Pollution Control Annex 1 explains interactions between pollution control legislation and planning.

Regional:

⇒ Policy QE4 of the states local authorities should encourage patterns of development which maintain and improve air quality.

Local:

⇒ EM2: states that development will not be permitted where damage to air quality cannot be mitigated.

⇒ EM5: states proposals resulting in pollution will only be permitted if the health, safety and amenity of users of the site or neighbouring sites can be assured.

⇒ OS10: planning obligations indicates that developments will be expected to mitigate against any likely impacts

Relevant facts

⇒ The air quality of urban areas has a strong influence on human health. This has been recognised in EU and UK policy and legislation.

⇒ Under the Environment Act 1995 the Council has a legal responsibility to work towards UK air quality objectives. Areas where these are exceeded must be designated, as Air Quality Management Areas and the Council must produce an Air Quality Action Plan to try to achieve the objectives.

Tools

⇒ NSCA guidance: Development Control: Planning for Air Quality.

⇒ Coventry City Councils Draft Air Quality Action Plan and air quality reports. www.coventry.gov.uk/airpollution

⇒ Advice on carrying out air quality assessments can be found at www.coventry.gov.uk/airpollution

⇒ Planning Policy Statement 23 allows mitigation of air quality through planning obligations.

⇒ West Midlands Local Transport Plan. www.westmidlandsltp.gov.uk

Evidence

⇒ In the UK it is estimated that between 12-24,000 people a year die prematurely due to excessive air pollution.

⇒ The life span of every person in the UK is estimated to be reduced by eight months due to air pollution.

⇒ Coventry has three air quality management areas for exceedence of NO_2. Monitoring continues to identify further areas.

⇒ The major source of air pollution in Coventry is road transport.

Table 8

Air quality

Key considerations

⇒ **Location:** Ensure that development type suits development site. For example it is not appropriate to build residential accommodation or schools in areas of high air pollution or to site a development where it will lead to increased air pollution in a residential or public area.

⇒ **Siting and design:** Ensure that where there is a localised and proximate source of air pollution buildings are designed and sited to reduce exposure to air pollution.

⇒ **Choice of building systems:** Ensure that the building is not contributing to poor air quality by ensuring that mechanical plant etc. has low NOx and PM10 emissions.

⇒ **Construction principles:** Reduce emissions of air pollution from the construction site by use of vehicles and plant with low emissions, by efficient transportation of goods to and from site and by managing and controlling emissions where they are unavoidable.

⇒ **Air quality assessments:** In locations that have been identified or clearly suffer from poor air quality, or where a development is likely to lead to a significant increase of air pollution, the Council will seek air quality assessments to show that the new development would not contribute to worsening of local air quality and that appropriate design measures have been implemented to protect future users and occupants of the buildings and surrounding accessible outdoor spaces.

5. Technical advice and additional information

5.1. There will be a full evaluation and review of this SPD once the Core Strategy has been adopted. This would assess whether the requirements are proving successful. This will be evidenced through the findings of the annual monitoring report.

5.2. To support each of these aspects of sustainable development additional sub-documents will be provided for the specific themes identified within this supplementary planning document and related to the West Midlands sustainability checklist.

5.3. The guidance provided will set out the importance of each aspect to be assessed and the levels considered by planners to be minimal, good and best practice. Above all the supporting documents are aimed at helping developers, constructors and planners understand the aspects of sustainable development in a practical way and in the Coventry context. Links will be made to other Council strategies and policies and other sources of useful information. A list of separate accompanying documents to this SPD include:

Renewable energy and climate change adaptation

5.4. A comprehensive toolkit for determining the level of renewable energy to be installed for any given development proposal is currently being developed on a sub-regional basis in conjunction with Solihull and Warwickshire authorities.

Travel plans, accessibility checklist and cycle parking standards

5.5. A comprehensive series of technical advice notes providing information on the standards and requirements for travel and transportation.

Resources - waste

5.6. This document will provide information on management of waste and recycling, both in operation and during construction. This item relates to 6.8 and 6.10 of the West Midlands Sustainability Checklist.

Resources - local materials

5.7. This document refers to use of locally resourced, reclaimed and low impact materials, with reference to items 6.2, 6.3 and 6.4 of the West Midlands Sustainability Checklist.

Resources - impacts

5.8. Information on appropriate use of land resources (heritage and archaeological features), noise and air quality, covering items 6.1, 6.2 and 6.9 of the West Midlands Sustainability Checklist.

Business:

5.9. Information will be provided in relation to creating competitive businesses and opportunities, employment and types of business. The document will highlight ways in which the Coventry Partnership can help developers in the city. This will relate to items in section 7 of the West Midlands Sustainability Checklist.

Buildings:

5.10. This document will provide some further detail regarding the Code for Sustainable Homes, sustainable non-domestic buildings and BREEAM. This will link to section 8.1 of the West Midlands Sustainability Checklist.

Appendix A: Regional Spatial Strategy, Preferred Option Policies

Policy SR1
Climate Change

'Local Planning Authorities in their LDDs and in determining planning applications should ensure all new buildings are designed and constructed to the highest possible environmental standards, and should work towards the achievement of carbon neutral developments, by:
A. Ensuring all planning applications for medium and large-scale development (greater than 10 residential units or 1,000 square metres) are accompanied by a sustainability statement. This should demonstrate that at least the 'good' standards, and wherever possible 'best practice' standards, as set out in the West Midlands Sustainability Checklist for Development, are achieved for each category. Appropriate targets should be set for individual developments through dialogue between the Local Planning Authority and developer, in Area Action Plans, or through a planning brief or master plan approach. Where a higher standard is required elsewhere in this policy, it should be applied.
B. Ensuring that all new housing developments meet the CABE Building for Life 'good' standard, and that all medium and large scale developments (greater than 10 residential units) meet the 'very good' standard.
C. Ensuring that all new homes meet at least level 3 of the Code for Sustainable Homes and considering the potential for securing higher standards of energy efficiency for new homes at level 4 before 2013 and zero carbon level 6 before 2016. Offices and other non-domestic buildings should aim for 10% below the target emission rate of the current Building Regulations by 2016.
D. Ensuring all new medium and large scale development (greater than 10 residential units or 1,000 square metres) incorporate renewable or low carbon energy equipment to meet at least 10% of the development's residual energy demand. Local authorities may use lower thresholds for the size of developments and set higher percentages for on-site generation where considered appropriate.
E. Maximising the potential for decentralised energy systems such as combined heat and power and community heating systems based on renewable and low-carbon energy.
F. Promoting the use of local and sustainable sources of materials, and the preparation of Site Waste Management Plans to ensure that at least 25% of the total minerals used derives from recycled and reused content
G. Requiring all new homes meet or exceed the water conservation standards in Level 4 of the Code for Sustainable Homes, that offices meet the BREEAM offices scale, and that other buildings achieve efficiency savings of at least 25%
H. Requiring the use of sustainable drainage systems and integrated surface water management in all medium and large developments, unless it can be demonstrated that it is not practicable to do so.
I. Promoting and seeking opportunities to introduce similar energy and water efficiency standards and sustainable drainage systems in existing buildings.

Policy SR2
Creating Sustainable Communities

Regional and local authorities, agencies and others in their spatial plans, strategies and programmes, should make provision for the full range of spatial requirements

needed to create sustainable communities. These should be of an appropriate size, scale, density and mix within the MUAs and the Settlements of Significant Development, as broadly indicated in Policy CF2, and in other areas where development is concentrated, including the requirement:
A. To provide for the planned levels of new housing, with sufficient population to achieve a well integrated mix of homes and inclusive communities, and to meet people's housing needs throughout their lives, including the provision of affordable housing.
B. For new employment generating activities to meet the needs of the existing population and any population arising from new housing development, and to create wealth within the community.
C. To create attractive, well-designed, adaptable, safe and secure developments, which have a sense of place, that respond to the distinctive features of the site, integrate with their surrounding context, respect and enhance local character, and maximise the reuse of buildings and brownfield land.
D. For necessary services and social infrastructure to meet the needs of the population, including health, education and skills, spiritual, sport and recreation, and cultural facilities, and the requirements of the emergency services.
E. For a comprehensive green infrastructure network that provides the full range of environmental services, including mitigation and adaptation to a changing climate, accessible greenspace for walking and cycling, sport and recreation, health and wellbeing and protects, consolidates and enhances biodiversity and geodiversity, especially the Region's European sites, and its historic assets and landscape character.
F. To provide the necessary public transport infrastructure so as to improve accessibility to employment, services and facilities both within and between settlements, particularly for the least affluent members of society, and give priority to the most low carbon forms of transport, such as walking and cycling, and reducing the need to travel by car, thus minimising the generation of transport-related emissions and the adverse effects associated with such emissions.
G. To provide the environmental infrastructure needed to support new development, such as larger scale renewable and decentralised energy generation, including combined heat and power, and community heating systems, sewerage infrastructure, sewage treatment works, sustainable drainage systems, water treatment, reuse and recycling of waste, resource recovery facilities and soft and hard infrastructure needed for flood risk management.

Policy SR3
Sustainable Design and Construction

Local Planning Authorities in their LDDs and in determining planning applications should ensure all new buildings are designed and constructed to the highest possible environmental standards, and should work towards the achievement of carbon neutral developments, by:
A. Ensuring all planning applications for medium and large-scale development (greater than 10 residential units or 1,000 square metres) are accompanied by a sustainability statement. This should demonstrate that at least the 'good' standards, and wherever possible 'best practice' standards, as set out in the West Midlands Sustainability Checklist for Development, are achieved for each category. Appropriate targets should be set for individual developments through dialogue between the Local Planning Authority and developer, in Area Action Plans, or through a planning brief or master plan approach .Where a higher standard is required elsewhere in this policy, it should be applied

B. Ensuring that all new housing developments meet the CABE Building for Life 'good' standard, and that all medium and large scale developments (greater than 10 residential units) meet the 'very good' standard.
C. Ensuring that all new homes meet at least level 3 of the Code for Sustainable Homes and considering the potential for securing higher standards of energy efficiency for new homes at level 4 before 2013 and zero carbon level 6 before 2016. Offices and other non-domestic buildings should aim for 10% below the target emission rate of the current Building Regulations by 2016.
D. Ensuring all new medium and large scale development (greater than 10 residential units or 1,000 square metres) incorporate renewable or low carbon energy equipment to meet at least 10% of the development's residual energy demand. Local authorities may use lower thresholds for the size of developments and set higher percentages for on-site generation where considered appropriate.
E. Maximising the potential for decentralised energy systems such as combined heat and power and community heating systems based on renewable and low-carbon energy.
F. Promoting the use of local and sustainable sources of materials, and the preparation of Site Waste Management Plans to ensure that at least 25% of the total minerals used derives from recycled and reused content.
G. Requiring all new homes meet or exceed the water conservation standards in Level 4 of the Code for Sustainable Homes, that offices meet the BREEAM offices scale, and that other buildings achieve efficiency savings of at least 25%
H. Requiring the use of sustainable drainage systems and integrated surface water management in all medium and large developments, unless it can be demonstrated that it is not practicable to do so.
I. Promoting and seeking opportunities to introduce similar energy and water efficiency standards and sustainable drainage systems in existing buildings.

Appendix B: Further references and contacts

- Action Energy and Design Advice – advice on energy conservation in new build and refurbishment – grant aided energy surveys and design consultancy: www.sustainable-energy.co.uk
- Association for Environment Conscious Building (AECB): www.aecb.net
- Building for a Future - regular magazine for the association for Environment Conscious Builders with search facility. AECB also offers lists of contractors www.aecb.net
- Building Research Establishment – for BREEAM assessments and guidance on energy conservation www.bre.co.uk
- Building Research Establishment (BRE) has developed an environmental profiles website which provides reliable and independent information about building materials and components. Another useful information source is Achieving Sustainability in Construction Procurement, produced by the Office of Government Commerce. Can be obtained, together with the BRE Green Guide to Specification from BRE. www.bre.co.uk
- CABE – frequently asked questions on flooding www.cabe.org.uk
- CIRIA 522: Sustainable Urban Drainage Systems – design manual for England and Wales www.ciria.org.uk
- Clear Skies – grants for renewable energy installations for householders and not for profit companies: www.lowcarbonbuildings.org.uk
- Combined Heat and Power Association: www.chpa.co.uk
- Construction Resources – eco building centre: materials, systems and training www.constructionresources.com
- Eco Management and Audit Scheme: www.emas.org.uk
- Energy Saving Trust (EST) – offers advice on energy efficiency and conservation to home owners and small businesses www.est.org.uk
- Environment Agency - waste licensing/exemption and pollution prevention, SUDS and Flood Risk Information: www.environment-agency.gov.uk
- For advice on materials, small constructors, sustainable building methods www.constructsustainably.com
- For further information go to the Sustainable Travel section of the Department for Transport website: www.dft.gov.uk
- For the full version of Planning Policy Guidance Note 13 go to www.communities.gov.uk

- To obtain a copy of the Travel Plan Resource Pack for employers contact the Energy Savings Trust Helpline on 0845 602 1425 or download it from the Department for Transport website www.dft.gov.uk
- For a copy of the Department for Transport Best Practice Guidance 'Using the Planning Process to Secure Travel Plans'. July 2002. To obtain a free copy please email dft@twoten.press.net Tel: 0870 1226 236.
- Friends of the Earth Good Wood Guide www.foe.co.uk
- Green/Living Roofs www.greenroofs.com www.greenroof.co.uk
- Guidance on minimising waste in construction www.rics.org
- ISO14001: More information from the BSI: www.bsi-global.com
- New Builder Online – Building for a Future – Green Building Bible, directory of builders www.newbuilder.co.uk
- Part L of the Building Regulations: www.projects.bre.co.uk
- Planning Policy Statement 25: Development and Flood Risk www.communities.gov.uk
- Sewers for Adoption – 5th Edition, 2001 www.wrcplc.co.uk
- Smartwaste - BRE have developed the Smartwaste tool to assist construction companies with sustainable waste management, reducing environmental impact and saving costs www.smartwaste.co.uk
- The Carbon Trust promotes low carbon technology for non-domestic uses in the private and public sector. www.thecarbontrust.co.uk
- UK Climate Impacts Programme offers information on the potential national and regional impacts of predicted climate change www.ukcip.org.uk
- Waste and Resources Action Programme (WRAP) - Government sponsored organisation creating markets for recycled products www.wrap.org.uk
- Wastewatch is an environmental charity promoting sustainable resource use: www.wastewatch.org.uk
- Water Resource Information Site: www.water.org.uk
- Worldwide Fund for Nature: www.wwf.org.uk

Appendix C: Glossary of terms

Combined Heat and Power (CHP)

A fuel-efficient energy technology that puts to use the by-product heat that is normally wasted to the environment.

Coventry Development Plan (CDP)

The adopted Unitary Development Plan for the City of Coventry (2001).

Evapotranspiration

The sum of evaporation and plant transpiration from the earth's land surface to atmosphere.

Local Development Document (LDD)

One of a number of documents which make up the Local Development Framework, including Development Plan Documents and Supplementary Planning Documents.

Local Development Framework (LDF)

The portfolio of Local Development Documents, which constitute the spatial planning policies for the city.

Part L

One element of the Building Regulations concerning dwellings and other buildings. Please refer to: www.planningportal.gov.uk

Planning Obligation

A legal agreement (Section 106) between a developer and the Local Planning Authority to provide facilities to the wider local community.

Regional Spatial Strategy (RSS)

The strategic plan for the region, which has statutory status and will form the basis for preparing Local Development Documents.

Renewable Energy

Energy from sources, which are not finite, including sun, wind and water.

Simplified Building Energy Model (SBEM)

A computer program that provides an analysis of a building's energy consumption. It calculates monthly energy use and carbon dioxide emissions of a building given a description of the building geometry, construction, use and lighting equipment.

Supplementary Planning Document (SPD)

A document, which elaborates on policies in Development Plan Documents and does not have development plan status. It requires community involvement in line with the Statement of Community Involvement.

Sustainability Appraisal and Strategic Environmental Assessment (SA/SEA)

A document, which assesses the environmental social, and economic effects of the policies and proposals contained in Development Plan Documents and Supplementary Planning Documents.

Swale

Linear depression formed in the ground to receive runoff and slowly move water to a discharge point.

Travel Plan

A document which lists actions to be taken to reduce levels of single occupancy private car trips to and from a site and encourage other sustainable modes, such as walking, cycling or public transport.

If you need this information in another format or language please contact us

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