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1. Introduction

1.1 This Supplementary Planning Guidance (SPG) forms part of the wider actions on sustainable design and construction within the City of York. These actions include the council's own Environmental Management System as well as the Council's new EcoDepot as a demonstration of sustainable design and construction. This SPG is interim guidance for policy GP4a – Sustainability, within the Local Plan incorporating the fourth set of changes. This document will play a key part when the new Local Development Framework is produced and supplementary planning documents replace supplementary planning guidance.

What is sustainable development?

1.2 Sustainable development is widely known as “development that meets the needs of the present without comprising the ability of the future generations to meet their own needs.” The Bruntland Commission 1982.

1.3 All development will have some environmental impact, however it is the Council's objective to achieve development that has a low or positive environmental impact whilst maximising social, economic and environmental gains. This means encouraging positive and long-term thinking when making decisions and taking account of a wide range of costs and benefits including those that can not be easily valued in monetary terms. It is in everyone's interest for development to be sustainable as a ‘damaged’ environment can impair quality of life and threaten economic growth.

1.4 The key to sustainable development is to take a long-term perspective when considering development proposals, as choices made today will have an impact on the future.

1.5 “Sustainable development is the core principal underpinning planning. At the heart of sustainable development is the simple idea of ensuring a better quality of life for everyone, and for future generations to come”. Planning Policy Statement 1.

1.1 1.6 Achieving sustainable development is at the forefront of the planning agenda since the introduction of the new planning system in September 2004, and has become the key vision of the City of York Draft Local Plan Incorporating the 4th set of changes Development Control Local Plan (Approved April 2005). The City of York is seen as a vibrant and historic city where modern life and business develop in harmony with the environment, while preserving the City's unique heritage for the future.

1.7 When applications are processed, they will be asked to supply a sustainability statement. The benefits of completing and implementing a sustainability statement will be to minimise the negative effects of proposals, making economic sense, as good sustainable design can deliver buildings with low running costs for both householders and businesses. Applicants can also demonstrate social and environmental responsibility by developing sustainably.

1.8 Applicants seeking planning permission should incorporate key sustainability design principles into proposals. Where possible for major proposals consideration should be given to assessment criteria set out by the Building Research Establishment Environment Assessment Method (BREEAM) and EcoHomes (the residential version of BREEAM), as they are seen as measures of best practice.

How does sustainable development affect planning applications?

1.9 This document has been prepared to supplement policy GP4a (Sustainability) in

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the City of York Draft Local Plan Incorporating the 4th set of changes Development Control Local Plan (Approved April 2005), and to outline the principles of the Sustainability Statement which will be requested when a planning application is submitted. It sets out guidelines for development proposals of **all** sizes from domestic extensions to large residential and commercial development, and aims to inform developers and individuals in the public and private sectors how to achieve best design practice in order to reach sustainable development across the City. Applications will not be processed by the Council until a Sustainability Statement is received.

- 1.10 In all (commercial and residential) development, a Sustainability Statement must be prepared with the submission of a planning application. This SPG is therefore very important as it will be a material consideration in determining all planning applications.

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2. Policy Overview

International policy

2.1 The principles of sustainable development have a long history starting at the UN conference on the Human Environment in 1972, in 1982, the Brundtland Commission provided a definition for sustainable development (see paragraph 1.1). The United Nations Commission on Sustainable Development was established in December 1992 after a landmark global agreement at the Earth Summit held in Rio de Janeiro. An important achievement was an agreement on the Climate Change Convention which in turn led to the Kyoto Protocol

2.2 The Kyoto Protocol was agreed in 1997 at the United Nations Framework Convention on Climate Change (UNFCCC), an international treaty on global warming. Countries which ratify this protocol committed to reducing their emissions of carbon dioxide and five other greenhouse gases, or engage in emissions trading if they maintain or increase emissions of these gases. A total of 141 countries have ratified the agreement. Notable exceptions include the United States and Australia. The agreement came into force on February 16, 2005.

National policy

2.3 National planning guidance is set out in Planning Policy Guidance Notes (PPG). Following the introduction of the Planning and Compulsory Purchase Act (2004), PPGs are being superseded by Planning Policy Statements (PPS). The government's position on the issue of sustainability is set out in PPS1 'Delivering Sustainable Development'.

2.3 PPS1 states '*sustainable development is the core principle underpinning land use planning*'. It sets out the overarching planning policies on how sustainable patterns of development will be

implemented through the new planning system.

2.4 The UK Sustainable Development Strategy ('**Securing the Future**', 2005) sets out the Government's overall principals and priorities for sustainable development. These principals include:

- living within Environmental Limits;
- ensuring a Strong, Healthy and Just Society;
- achieving a Sustainable Economy;
- promoting Good Governance; and,
- using Sound Science Responsibly.

Regional policy

2.5 The Regional Spatial Strategy (RSS) for Yorkshire and Humber to 2016 (based on Selective Review of RPG12) sets out the vision for the region. The key objectives of the overall spatial strategy set out in the RSS are based on the principles of sustainable development.

2.6 The emerging (RSS) for Yorkshire and the Humber commenced in July 2003, and is due to be adopted by 2007. This document "provides a framework for 'where things go' and 'how much' development should take place; it includes a regional transport strategy; and links all this with broader issues such as the environment, sustainable development and quality of life". (RSS – The Yorkshire and Humber Plan, Draft for public Consultation – December 2005).

2.7 In 2000 the Yorkshire and Humber Regional Assembly agreed on fifteen interrelated sustainable development aims for the region and four cross cutting themes to be applied when working towards these aims. These can be found in '*Advancing Together - Working Towards a Sustainable Development Framework*', which is currently under review, and can be obtained from www.yhassembly.gov.uk

2.8 A number of regional and sub-regional strategies take forward '*Advancing*

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Together which assess strategic needs, opportunities and priorities in the region, of which there is a sustainable development strategy.

Local Policy

2.7 2.9 The overarching aim of the City of York Draft Local Plan Incorporating the 4th set of changes Development Control Local Plan (Approved April 2005), is to achieve sustainable patterns of development. Policy GP4a, as set out in Figure 1, introduces ten criteria that cover a wide spectrum of environmental, social and economic issues that should be used to judge the sustainability of a site. The criteria of policy GP4a can be found in chapter 3 of this document.

Policy requirements in terms of the sustainability statement.

2.10 A Sustainability Statement will set out key sustainable development issues relevant to the development and describe how they have complied with the guidelines. A planning application will not be registered by the Council until completion of a Sustainability Statement. Therefore it is in the applicant's best interest to use this guidance and if necessary discuss proposals with the Council at an early stage for clarification and to make the process easier for all.

2.11 It must be noted that sustainability is not just a planning policy issue. Building Control legislation and regulation (along with other Council departments) have a vital part to play. For example, the new Sustainable and Secure Buildings Act (2004), provides regulations relating to the use of fuel and power in properties and CO₂ emissions. For more information visit the Building Control website at www.york.gov.uk/buildingcontrol or telephone on 01904 551333.



Millennium Bridge, a pedestrian and cycle bridge which forms part of the cycle and pedestrian network across the City. Linking Fulford and South Bank area

Figure 1: Policy GP4a

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Proposals for all developments should have regard to the principles of sustainable development as summarised in criteria below.

All commercial and residential developments will be required to be accompanied by a sustainability statement. The document should describe how the proposal fits with the criteria listed below and will be judged on its sustainability in these terms.

Development should:

- a) provide details setting out the accessibility of the site by means other than the car and, where the type and size of the development requires, be within 400m walk of a frequent public transport route and easily accessible for pedestrians and cyclists;
- b) contribute toward meeting the social needs of communities within the City of York (including housing, community and recreational facilities, car clubs, recycling facilities and communal laundry blocks) and to safe and socially inclusive environments;
- c) maintain or increase the economic prosperity and diversity of the City of York, and maximise employment opportunities (including supporting local goods and services and providing training and employment for local unemployed and young people);
- d) be of a high quality design, with the aim of conserving and enhancing the local character, heritage and distinctiveness of the City;
- e) minimise the use of non-renewable resources, re-use materials already on the development site, and seek to make use of grey water systems both during construction and throughout the use of the development. Any

waste generated through the development should be managed safely, recycled and/or reused. The 'whole life' costs of materials should be considered;

- f) Minimise pollution, including that relating to air, water, land, light and noise;
- g) Conserve and enhance natural areas and landscape features, provide both formal and informal open space, wildlife areas and room for trees to reach full growth;
- h) Maximise the use of renewable resources on development sites and seek to make use of renewable energy sources, such as heat exchangers and photovoltaic cells;
- i) Make adequate provision for the storage and collection of refuse and recycling.

All developments from domestic extensions to larger proposals will be expected to provide a sustainability statement. However, these will vary in length depending on the size and complexity of the development. The SPG will provide information on the amount of detail covered. The issues that are addressed in the statement need to cover the lifetime of the development and should describe how a proposal fits with the criteria listed and will be judged on its suitability in these terms.

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3. Sustainable development issues

3.1 As outlined in policy GP4a, a criteria of sustainable development issues has been identified. These should be used in addition to other criteria for example policy GP5 Renewable Energy which creates an interlinkage:

Accessibility

Policy GP4a: a) Development should provide details setting out the accessibility of the site by means other than the car and, where the type and size of development requires, be within 400m walk of a frequent public transport route and easily accessibly for pedestrians and cyclists.

3.2 All applicants for new development must set out details showing the accessibility of the site by other means than the car. For residential development over 1.0 hectares/40 units a frequent public transport route must be within 400m walk and the development must be easily accessible for pedestrians and cyclists. For offices(B1) the threshold is 0.8 hectares/1,000sq m gross floor area, for industry (B2,B8) 2.0 hectares/1,000 sq m gross floor area, and for other developments the threshold is 30+ vehicle movements in any hour (determined by a Transport Impact Assessment).

Walking

3.3 Unfortunately there are still too many short trips being made by car, therefore the council will encourage short trips to be made by walking wherever possible.

3.4 It is essential that pedestrian links to new development are an integral part of the design so that the development and the pedestrian environment are harmonised. Pedestrian routes should be accessible by all including those with mobility impairments. It is therefore important to avoid steep gradients, provide dropped kerbs and use

textured/sensory materials at crossing points.

3.5 PERSONAL SAFETY IS ALSO PARAMOUNT. PEDESTRIAN ROUTES SHOULD BE DESIGNED TO BE AS SAFE AS POSSIBLE, WHICH MAY, FOR EXAMPLE, INVOLVE THE USE OF CCTV, SUFFICIENT LIGHTING OR THE SITING OF ROUTES OVERLOOKED BY DEVELOPMENT.

Did you know?

City of York Council conducted an individualised marketing pilot project called Intelligent Travel in 2003-2004. During the project, people in three areas of York were contacted by phone, mail and home visits to discuss their preferred method of transport. Incentives were given to people to try walking, cycling or taking the bus to work or for their leisure trips. The results showed a significant increase in walking, especially for short trips.

Cycling

3.6 Whilst cyclists can take advantage of the existing road network, many do not feel safe enough to cycle. Therefore, developers are encouraged to provide specific routes for cyclists away from road traffic and clearly defined from pedestrians.

3.7 Cycle routes to new developments should be an integral part of the design to encourage new cyclists whilst providing improved facilities for existing cyclists. It is important that cycle routes are safe, well lit, highly visible, overlooked by development and not bounded too closely by walls and fences. It is also important that existing and proposed cycle facilities are not compromised by new development.

3.8 Cycle parking facilities should also be provided that are easily accessible, well lit, covered and secure.

3.9 More specific advice can be found in the Council's *Highway Design Guide*,

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available at
www.york.gov.uk/roads/highwaydesign

Did you know?

Birch Park housing development provided each dwelling with the choice of six months free bus travel or a new bicycle to encourage sustainable travel.

York Hospitals provided 28 cycle lockers for their staff in March 2004. The lockers were all booked within a week and the hospitals are now looking at ways to provide more lockers.

Public Transport

3.10 The availability and use of public transport is an important factor in determining location of new development. For major applications early consultation with public transport operators is encouraged to allow the best opportunity to plan resources to deliver new or enhanced public transport services.

- 3.11 The siting and design of new developments should allow for direct access by public transport or should provide links to public transport close by. For example, the development should provide adequate routes through the site for buses, bus shelters and lay-bys on the edge of the site, or provide clear direct routes for pedestrians to nearby bus stops or rail stations including well-placed crossings on major roads. Reference should also be made to policy SP7a in the City of York Draft Local Plan incorporating the fourth set of changes Development Control Local Plan (Approved April 2005). This policy talks about a sequential approach to development outside York City Centre on applications for new retail, commercial, leisure and office development.

Did you know?

York's major bus operator, First York, offers at least a 10% discount on bus tickets for staff of companies that have developed a travel plan. There are currently 4 major employers that have developed a travel plan with First York; namely York district Hospital, York St John's College, York University and Norwich Union.



Community Involvement:

Policy GP4a: b) Development should contribute toward meeting the social needs of communities within the City of York (including housing, community and recreational facilities, car clubs, recycling facilities and communal laundry blocks) and to safe and socially inclusive environments

- 3.12 The Council encourages community involvement at every opportunity and at the earliest stage of the development process. This can include taking plans for major applications to ward committees, or when making domestic alterations consulting with neighbours before an application is submitted. Early community involvement may help to overcome any objections that may arise at a later date. For more information please see our Statement of Community Involvement, at www.york.gov.uk/planning.
- 3.13 A key element of sustainability is creating diverse communities. Developers of major applications are encouraged to provide a mix of type and sizes of homes, a key component of creating diverse communities. By providing a range of

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housing types diverse communities can be developed and maintained.

Did you know?

As part of the preparation for the Statement of Community Involvement which is part of York's Local Development Framework, the City of York Council held various workshops with members of the public and stakeholders at Merchant Taylor's Hall in York during the summer of 2005. Methods of consultation and key issues were discussed to gather views on how the Council were to engage at all levels including hard to reach groups.

Local Economy

Policy GP4a: c) Development should maintain or increase the economic prosperity and diversity of the City of York, and maximise employment opportunities (including supporting local goods and services and providing training and employment for local unemployed and young people).

- 3.14 By having regard for the principles of sustainable development, this will benefit the local economy. This can be done through maximising access to skills and knowledge to generate employment opportunities for the local community.
- 3.15 The Council's approved Economic Development Strategy highlights the need to strengthen the economy, with a target of creating 19,000 new jobs by 2021. In order to fill these jobs it is important to support the local labour market. To do this in a sustainable way, those living in York who are unemployed or under-employed require support to reach their full employment potential.
- 3.16 A lack of information about skills and training can stand in the way of gaining employment. An encouraging solution to this is the Learning and Skills Council of North Yorkshire, who manage an

information, advice and guidance service for adults to access free information about learning, qualifications, training and work. The Council encourages developers of major applications to form partnerships with the Learning and Skills Council with the potential of offering local people the chance to gain work experience and training in the construction industry for example.

- 3.17 Favourable consideration will also be given to proposals which recruit local labour, provide funding for information, advice and guidance programmes or assist local supply chains. For major applications, developers may be required to enter into a section 106 Agreement to ensure that skills training is linked to the development to ensure that local people benefit from employment opportunities.

Did you know?

York has the SALLY group (Supporting Adult Lifelong Learning in York), which tackles many of the barriers to employment experienced by those most marginalised from learning and work. The SALLY group also chairs the Future Prospects team, which informs the City's advice and guidance organisation with respect to learning and work. For more information visit; www.futureprospects.org.uk

Design

Policy GP4a: d) Development should be of a high quality design, with the aim of conserving and enhancing the local character, heritage and distinctiveness of the City

- 3.18 The council requires development of the highest quality design as it has a fundamental importance in enhancing environmental quality and sustainability. Design not only affects what the building looks like but how well it 'sits' and functions in its environment. Quality design is highly significant both in positive and negative terms to the physical and mental well being of a community and individuals, and therefore to sustainable development. It can help

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create a sense of place and reinforce local distinctiveness, this can involve using materials or incorporating design features which are typical of the area. One aspect of this can be the retention of buildings and features of aesthetic, historical or cultural significance which contribute to the distinct character of the area.

3.19 Therefore, when considering the design of a development the principles of sustainability should be paramount.

3.20 Designing for ‘long life – loose fit’ buildings is encouraged by the Council. Such buildings are not restrictively tailored to the requirements of the initial occupier. They are likely to be capable of being split up to allow for occupation by several different users, and to accommodate a range of different uses. The location of amenities and stairs are the most critical features in determining flexibility of a building, as these are the most difficult and expensive to relocate. A building that is designed for ‘long life’ should aim at high quality materials and high quality design, in order to encourage the re-use at a future time, in preference to demolition and redevelopment.

3.21 Considerations should be made into the viability of designing the site to maximise passive solar gain¹ through orientation, location of individual buildings, and landscaping to take full advantage of the benefits that sunlight can bring as a source of light, heat and energy. Such measures can reduce energy requirements of a typical dwelling by 20%.

3.22 To exploit solar gain the following design measure should be considered:

- Locate rooms that require higher internal temperatures on the south side of the building
- Orientate buildings within 30 degrees south to maximise solar gain and the

potential to use the building’s thermal capacity².

- Utilise unheated conservatories
- Give careful consideration to window size and location depending on the building/room use and orientation.
- Aim for high levels of insulation
- Consider wide fronted buildings in residential developments, with little depth (less than 16m) because narrow fronted houses that are deep in plan require more light and heat as the sun can not access the majority of the buildings area.

RESOURCES

Policy GP4a: e) Development should minimise the use of non-renewable resources, re-use materials already on the development site, and seek to make use of grey water systems both during construction and throughout the use of the development. Any waste generated through the development should be managed safely, recycled and/or reused. The ‘whole life’ costs of materials should be considered.

3.23 The Council encourages applicants to demonstrate how they propose to reduce the amount of waste generated at all stages of development, and how they intend to increase the amount of waste recycled.

3.24 The materials used in a development will have an impact on the financial cost, appearance and environmental impact of the proposal. Where possible, applicants should consider using:

- Recycled materials – re-use materials from the site (if demolishing existing buildings) either as aggregates or as a building material. If there are none available on site, consider obtaining recycled materials from a local source.

¹ Passive solar gain is the heating of a building from the sun.

² The thermal capacity of a building is a measure of its capacity to absorb and store heat. Brick, concrete and stone have a high thermal capacity.

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- Locally produced materials – these have travelled less so have a reduced environmental impact and also purchasing them helps support local jobs and business.
- Natural materials – these generally have a reduced environmental impact, but ensure that timber purchases are from independently accredited sustainably managed forests, the most commonly known being FSC (Forestry Stewardship Certified).
- Materials with reduced environmental impact – For more information please see ‘The green guide to specification’ produced by the Building Research Establishment (BRE) available to order at www.bre.co.uk

Did you know?

Yorwaste (a waste management company) at Harewood Whin provide aggregates made from waste building materials, (including sand, gravel, crushed rock and other bulk materials used by the construction industry – Planning Portal 2006). For more information call Sales and Marketing at Yorwaste on 01609 774400 for more information, or visit www.yorwaste.co.uk.

- 3.25 Embodied energy is the amount of fossil fuel – coal, oil, gas – used to produce, process and transport a given material. Low embodied energy is desirable for sustainable development, therefore applicants should demonstrate how the choice of building material reduces the embodied energy of the development. The re-use of building materials commonly saves about 95% of embodied energy.
- 3.26 The re-use of building materials not only reduces embodied energy but has a number of benefits. If the materials are from the proposed site itself the costs of removal and disposal are reduced and the transport of substitute materials avoided. Re-used materials also have aesthetic benefits as they will usually be weathered and make the development look as though it is long established. The Council therefore encourages the re-use of building materials in new developments.

- 3.27 If materials cannot be re-used developers should always ensure that the new materials used come from renewable supplies (e.g. FSC (Forest Stewardship Council) Timber which is the international body created to certify responsible forestry management, or from some other sustainable managed resource).
- 3.28 Applicants must demonstrate that they have considered the ‘whole life’ costs of a development. This means considering not only the cost of construction but also its maintenance and ultimately disposal of parts. Low running and maintenance costs would be a considerable marketing advantage.

Pollution

Policy GP4a: f) Development should minimise pollution, including that relating to air, water, land, light and noise.

- 3.29 The Council recognises that steps must be taken to reduce environmentally damaging emissions from developments. Environmental damage can be limited through the careful selection of appropriate construction materials (see above), and ensuring that the manufacture of the building materials does not cause harmful emissions or other environmental or social damage. Materials which involve environmentally damaging CFC (chlorofluorocarbons) and HCFC gases (e.g. certain types of insulation and air conditioning materials), should be avoided, as they have been proven to accelerate the depletion of ozone in the earth’s stratosphere.
- 3.30 Natural drainage systems, which help reduce surface water run-off and therefore water pollution and flooding should be considered in developments. Developers should also reduce areas of hardstanding which can help to reduce surface run-off, as well as sustainable urban drainage systems.

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3.31 It is also important that proposals minimise light pollution (environmental pollution consisting of harmful or annoying light), both from the point of view of wasted energy, and in the interests of residential amenity, wildlife and the natural environment.

Landscape and Wildlife

Policy GP4a: g) Development should conserve and enhance natural areas and landscape features, provide both formal and informal open space, wildlife areas and room for trees to reach full growth.

3.32 Legislation exists to protect trees from felling, lopping and topping and their loss should be avoided where at all practical, as such, developments should be designed to incorporate existing features. For example, trees and hedges often provide a 'ready made' attractive landscape feature, and not only look good, but reduce surface run off and can increase the energy efficiency of a building and absorb pollutants and CO². It is essential that the value of retaining existing vegetation and habitats is realised by developers rather than removing them to suit a blanket design.

3.33 The careful selection of plant species can add to the biodiversity of an area and attract wildlife. Developers are encouraged to source plants for their development locally (even contract grown if notified early enough). This will help support local businesses and promote sustainable transport initiatives. Plants should be chosen to suit the soil conditions and climate/micro climate to avoid importing topsoil and remedial materials, like artificial fertilisers. Low maintenance plants should be chosen to reduce the need for weed killers.

3.34 The redevelopment of a site may offer the chance to create a new valuable habitat, or to enhance or extend an existing habitat. Developers of major applications should be aware of and enable the

protection of existing valuable landscape and wildlife, and have awareness of areas that have potential for creating new valuable habitats.

3.35 Simple changes can be made in building design to make developments more wildlife friendly, information is available from the Conservation team to assist with this.

3.36 The concept of 'green roofs' are far more common on the continent, but over the last few years there has been an increased interest in the UK. As such, where possible, the Council encourages green roofs in new developments.



An example of a 'green roof' at the York Environmental Community Centre.

3.37 The environmental benefits of turf and green roofs are widely recognised, while roof gardens and roof terraces provide much-needed outdoor space in urban areas. Due to the high degree of insulation that they provide, turf roofs are known for their ability to provide a constant temperature throughout the year. Turf roofs also have the ability to soften harsh edges of buildings in sensitive environments, making them blend in with the surrounding area. This is something which should be incorporated within future developments within the City of York. Turf and green roofs also provide habitats for insects and other small animals.

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Energy

POLICY GP4A: h) Development should maximise the use of renewable resources on development sites and seek to make use of renewable energy sources, such as heat exchangers and photovoltaic cells.

3.38 Energy efficiency is about minimising the amount of energy we waste and maximise the useful outputs of energy. Renewable energy (which include, solar, wind and hydro) offer clean sources of energy that are a lot friendlier to the environment than conventional energy technologies. Both of these elements must be considered in all developments.

3.39 Improving levels of insulation is an effective way to reduce energy consumption. This can include the insulation of walls, floors, roofs, doors, windows and window frames. Windows should be double glazed, or even treble glazed, and low emissive glass can also be used to reduce heat loss. Timber window frames have better thermal efficiency than steel or aluminium. In addition, ensuring window size and outlook provide adequate natural lighting for the rooms they serve can increase energy efficiency. Please see paragraph 3.21 for information on how design can improve energy efficiency.

3.40 Measures to generate renewable energy are encouraged in all developments. Below are some examples:

- *Solar Thermal* – This system takes energy from the sun to heat water. In the summer this can provide hot water needs, without the use of the boiler and therefore energy. In the winter it raises the temperature of the water in heating system so the boiler does less work and therefore uses less energy. These systems can save between 30 - 40% on fuel bills. Grants are available from the government to cover some of the cost of installation.

- *Photovoltaic cells or solar panels* – These use the sun's energy to produce electricity. They come in the form of panels or roof tiles and grants are available to help cover the costs of installation.
- *Wind* – There are now a number of building mounted and small wind turbines for use in urban areas. They would require planning consent and should therefore form part of any application for the proposal, however they can be very cost effective and grants are available.
- *Heat Pumps* – These can be used efficiently to heat and cool a building by drawing heat from the ground (or air) concentrating it and delivering it to the building. Systems use a pump and compressor to remove heat from one side of the circuit and eject heat to the other.

3.41 Before generating renewable energy on-site make sure the proposals, and the rest of the property for domestic alterations, is adequately insulated. This includes cavity wall insulation, loft insulation, double glazing or secondary glazing.

Did you know?
For domestic alterations a FREE DIY Home Energy Check is available at the Energy Efficiency Advice Centre (EEAC). Call them on 0800 512 012, or see their website www.energypartnership.org.uk
Grants are available from the DTI for renewable energy installations see the Low Carbon Buildings Programme on: <http://www.est.org.uk/housingbuildings/funding/lowcarbonbuildings/> or call 0800 915 7722.

3.42 All properties built since 1995 have water meters so there is a direct link between how much you use and how much you pay. Older houses do not have

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meters but we all have a responsibility to reduce water consumption. The simplest ways are to:

- Install a water butt on down pipes to collect rainwater to use on the garden, or a rainwater harvesting system that collects rainwater, then treats and stores it for use in toilets and washing machines. A harvesting system can reduce household water use by up to 50% depending on the size of the system.
- If the proposal includes a new bathroom consider fitting spray taps and installing water efficient toilet cisterns – generally one with a capacity of 4.5 litres as this will then use less water.
- Alternatively there are systems that collect ‘grey water’ from wash basins, bath/shower and washing machines, treat and store it for use in the toilet and washing machine. These can reduce water use by between 30 to 40%.

3.43 The initial cost of such schemes may be high, but by reducing running costs and water consumption, can save money in the longer term.

Recycling

Policy GP4a: i) Development should make adequate provision for the storage and collection of refuse and recycling.

3.44 Sufficient facilities for recycling material such as glass, metal, plastic, green waste and paper is desirable. Enough space for composting organic waste must be provided in all developments.

3.45 The York and North Yorkshire waste management partnership, made up of City of York Council, North Yorkshire County Council, and the seven District /borough councils in North Yorkshire have adopted a revised joint municipal waste strategy in 2006. It is called " Lets talk

Less Rubbish". This waste management strategy sets minimum targets for district and borough councils to improve current landfill diversion and recycling performance . The City of York Council therefore have a commitment to further improving existing recycling performance and to meet challenging targets , which can only be done by commitment at all levels. For more information about the joint municipal waste management strategy visit www.rethinkrubbish-northyorks.com .



For information on meeting the requirements of Policy GP4a please see section 6 for a sustainability statement checklist

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4. Best Practice

- 4.1 The Council encourages, the use of best practice, and suggest that developers consider Building Research Establishment (BRE) standards as a benchmark for sustainable development. In particular the Building Research Establishment's Environmental Assessment Method (BREEAM), and the EcoHomes scheme should be considered for major proposals. Smaller proposal should consider the EcoHomes scheme if relevant to the development.
- 4.2 Assessment using BRE standards is a clear and comprehensive method of specifying the sustainability performance of proposals to comply with the Council's vision of sustainable development within York.

BREEAM

- 4.3 BREEAM is used to assess the environmental performance of new and existing buildings, and is regarded nationally as a measure of best practice in environmental design. It covers a wide range of environmental issues within one assessment.
- 4.4 BREEAM assess the performance of buildings in the following areas:
- Energy use: operational energy and carbon dioxide issues
 - Pollution: air and water pollution issues
 - Transport: Transport-related CO₂ and location-related factors
 - Land-use: Greenfield and Brownfield sites
 - Ecology: ecological value conservation and enhancement of the site
 - Materials: environmental implication of building materials, including life-cycle impacts
 - Water: consumption and water efficiency
- 4.5 Developers are encouraged to consider these issues at the earliest opportunity to

maximise chances of achieving a high BREEAM rating.

- 4.6 Credits are awarded in each area according to performance. A set of environmental weightings then enables the credits to be added together to produce a single overall score. The building is then rated on a scale of 'pass', 'good', 'very good' or 'excellent', and awarded with a certificate that can be used for promotional purposes.
- 4.7 Assessment covers a range of building types including, offices, industrial units, retail units and schools. Housing is assessed by BREs EcoHomes scheme (please see below), and other building types such as leisure centres can be assessed using a bespoke version of BREEAM.

EcoHomes

- 4.8 BRE runs a widely-accepted national standard for the design of sustainable housing scheme called *EcoHomes Environmental Ratings for Homes*.
- 4.9 The scheme considers wide-ranging environmental concerns and balances these against the need for high-quality, safe and healthy homes. The issues below are optional, the most appropriate issues for each development can be selected and assessed:
- Energy;
 - Water;
 - Pollution;
 - Materials;
 - Transport;
 - Ecology and land use; and
 - Health and wellbeing.
- 4.10 The EcoHomes scheme is straightforward, flexible and independent in assessing how environmentally friendly and sustainable, developments are. Developments that meet the necessary standard are given a rating of 'pass',

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‘good’, ‘very good’ or ‘excellent’, providing a credible label for new and renovated homes.

- 4.11 To get an assessment, information about the proposed development must be entered into a workbook provided by BRE. A licensed assessor, trained and monitored by the BRE, checks the relevant information has been provided and gives a rating, which is passed back to BRE to be approved. For an example of an EcoHomes assessment please see Appendix 1.

Additional Best Practice

Resources

- 4.12 In the European Union it is estimated that one third of all waste generated is from construction and demolition (The environment in your pocket, DEFRA, 2004). The more that is thrown away on a construction site the higher the cost of landfill charges to dispose of that waste. Reducing waste means reducing cost, therefore it is encouraged that where possible materials are re-used and recycled.

Energy

- 4.12 Where appliances are included in a development the Council encourages developers to provide energy efficient appliances, in line with the European Union Energy Rating. This can greatly increase the energy efficiency of a building as well as making a development more marketable.
- 4.13 The EU Energy Rating measures energy efficiency of appliances on a seven point scale from A (most efficient) to G (least efficient). The rating covers a variety of household appliances including fridges, freezers and fridge-freezers, washing machines, electric tumble driers, combined washer-driers, lamps, electric ovens and air conditioners. By law, all retailers in the EU must display an energy efficiency rating on these products. A

product with an A rating will have passed a rigorous, impartial testing procedure, so you can be sure of its high energy efficiency. During 2004, two new energy classes were created for fridges and freezers; A+ and A++. Models with these symbols are even more energy efficient than A-rated ones.

- 4.14 Developers are also encouraged to provide information packs for new owners, including information on how energy efficient the building is, and also how best to make it as efficient as possible in the future. This is particularly important for residential schemes, but can also be applied to commercial schemes.

- 4.15 ‘Green Building’ is an adopted practice to help save the environment. There are two main components: energy saving and construction waste. To save energy the ‘Green Building’s’ material selection help to create better heating, water and electrical efficiency. Further more, the material planning implemented by Green Building techniques can also help reduce construction material waste.

Through better building design and material selection Green Building practices have helped in reducing electric, water, and gas costs. Furthermore, Green Building practices have help save the earth’s environment because less energy and natural resources are required by the buildings. There are many strategies, designs and materials to choose from to create a building worthy of a **Green Building** title. Green Building consultants are available to help implement the techniques and strategies needed.

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5. Further Advice

- 5.1 For more information on this document please contact:

Kristina Peat - Sustainability Officer
01904 551666
kristina.peat@york.gov.uk
or
The City Development Team
01904 551466
citydevelopment@york.gov.uk

- 5.2 For a copy of the City of York Draft Local Plan Incorporating the 4th set of changes Development Control Local Plan (Approved April 2005), please contact the City Development Team or visit www.york.gov.uk/planning/localplan

- 4.1 5.3 For more detailed advice on some of the sustainability issues raised in the previous section please see the following:

For more information on pedestrian accessibility:

The UK campaign for better streets and public areas at www.livingstreets.org.uk

Advice on best practice from the Department of Transport at www.dft.gov.uk

For more information on cycle access:

The national cycling portal at www.bikeforall.net

Sustrans (for a useful source of cycle route maps) at www.sustrans.org.uk

York cycle campaign at www.yorkcyclecampaign.org.uk

National touring club at www.ctc.ork.uk

National cycling strategy board at www.nationalcyclingstrategy.org.uk

For more information on community involvement:

Participation Works! 21 Techniques of community participation for the 21st Century at www.renewal.net

Community Development Foundation at www.cdf.org.uk

Advice on shaping local environments at www.communityplanning.net

For more information on the local economy:

Department for Education and Skills at www.dfes.gov

Learning and Skills Council at www.lsc.gov.uk

Centre for employment and enterprise development at www.ceed.co.uk

For more information on resources:

Building Research Establishment at www.bre.co.uk

North Yorkshire and York waste management company at www.yorwaste.co.uk

For more information on landscape and Wildlife:

The Association of Wildlife Trusts www.awtc.co.uk

The Institute of Ecology and Environmental Management www.ieem.org.uk

The Bat Conservation Trust at www.bats.org.uk

Bats In buildings at www.batcon.org/binb

RSPB leaflets 'What's in the roof?' and 'Save the house sparrow initiative' available at www.rspb.org.uk

For more information on energy please see:

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Overview of renewable energy, visit green power at www.ncgp.org

Advice on renewable energy and how to apply for grants please see the Low Carbon Buildings Programme on: <http://www.est.org.uk/housingbuildings/funding/lowcarbonbuildings/> or call 0800 915 7722.

Advice on energy efficient appliances please see the Energy Saving Trust at, www.est.org.uk

Advice on energy saving and construction waste see the green buildings page at www.big-builders.com/construction

For more information about BREEAM please see:
www.bre.co.uk or *www.breeam.co.uk*

For more information about Ecohomes please see:
www.breeam.org/ecohomes



Beckfield Lane Recycling Centre.

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6. Sustainability Statement Checklist

- 6.1 The following is a checklist to assist in producing a Sustainability Statement, to ensure the requirements of Policy GP4a are met. It must be stressed that these checklists do not in any way constitute what is to be actually submitted as a sustainability statement. Instead, it is meant to be a starting point for applicants, to ensure enough detail is included in sustainability statements, and that it meets the criteria of policy GP4a.
- 6.2 A Sustainability Statement should consider the sustainability issues identified in sections 3 and 4, and where possible seek BRE standards as a benchmark. The following questions are intended to be a checklist for completing a written statement of sustainability, which for small domestic alterations may be a paragraph in length or for major proposals might entail a long report. Applicants need to address the areas identified for each criteria of policy GP4a, and look at the points in the checklist as a basis for the statement.
- 6.3 For domestic alterations please see Figure 2, and for larger developments Figure 3.

EcoHomes, Cemetery Road, Fishergate



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Figure 2: Checklist for Domestic Alterations

a) Accessibility

Does the proposal make provision for the needs of cyclists?

Does the development provide cycle storage that is secure, convenient and safe?

b) Community Involvement

Have you kept local people informed of your proposals?

Does the proposal consider the perspective of the local residents?

c) Local Economy

Are any local supplies/companies being considered during the construction?

d) Design

Does the design make a positive visual contribution to the site and to adjacent areas?

Has the design respected the character of the area and of adjoining properties?

Have the windows been sized according to the direction of the building to minimise heat loss and maximise solar gain?

e) Resources

Have opportunities been maximised to reuse and recycle materials?

Does the proposal consider the 'whole life' costs of the development?

Does the proposal maximise the use of materials with reduced environmental impact?

Does the proposal demonstrate how waste will be reduced during construction and occupation of the development?

f) Pollution

Have measures been incorporated to reduce pollution, including light pollution?

Does the proposal seek to reduce rainwater run-off?

g) Landscape and Wildlife

What percentage of proposed planting contains indigenous species?

Does the proposal incorporate building design that makes the development more wildlife friendly?

h) Energy

Have measures been taken to minimise the consumption of energy?

Have measures been taken to reduce water consumption?

Does the proposal provide renewable energy on-site?

i) Recycling

Has space been provided to store materials that can be recycled?

Has space been provided to store composting organic waste?

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Figure 3: Checklist for larger developments.

a) Accessibility

Walking

Does the proposal make provision for the needs of pedestrians?

Does the proposal make use of/link into existing pedestrian routes?

Are pedestrian routes well lit and safe and do they contribute to a secure environment?

Are pedestrian routes suitable for those with mobility or other impairments?

Cycling

Does the proposal make provision for the needs of cyclists?

Does the proposal make use of/link into to existing cycle routes?

Does the development provide cycle storage that is secure, convenient and safe?

Are cycle routes well lit and safe and do they contribute to a secure environment?

Public Transport

Does the proposed development provide convenient access to public transport (either bus or rail)?

Is the proposed development capable of being accessed by public transport?

Does the proposal provide increased or new public transport services in addition to existing services?

b) Community Involvement

Have you kept local people informed of your proposals?

Does the proposal consider the perspective of the local residents?

Has the planning of the activity involved working in partnership and the involvement of affected groups?

Has consideration been given to why and in what way the community should be involved?

How will adequate time and resources be built into the development process for effective community involvement?

How will socially excluded and difficult to reach residents be involved in the development process?

c) Local Economy

Does the development have links with local regeneration and employment initiatives?

Are any local supplies/companies being considered during the construction phase and afterwards?

Does the development offer any skills (re) training and long life learning for local people?

How will the development provide new opportunities for training and developing the skills of local people?

How will developments affect the local economy in terms of the jobs created and lost?

d) Design

Does the design make a positive visual contribution to the site and to adjacent areas?

Has the design respected the character of the area and of adjoining properties?

Have the windows been sized according to the direction of the building to minimise heat loss and maximise solar gain?

Have existing buildings been reused where possible?

Is the height of building similar to those around it to prevent heat loss by exposure and

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to reduce energy demands? Are the buildings grouped together for the same reasons?

e) Resources

Have opportunities been maximised to reuse and recycle materials?

Does the proposal consider the 'whole life' costs of the development?

Does the proposal maximise the use of materials with reduced environmental impact?

Does the proposal demonstrate how waste will be reduced during construction and occupation of the development?

f) Pollution

Have measures been incorporated to reduce pollution, including light pollution?

Does the proposal seek to reduce rainwater run-off?

g) Landscape and Wildlife

Does the proposal include landscaping/public space and if so to what extent?

Has the existing or proposed landscaping treatment been assessed for how it can contribute to the comfort and amenity of a development by excluding cold winds and creating sun traps in gardens and open space?

What percentage of the proposed planting contains indigenous species?

Is off street construction being incorporated into development?

Does it make use of/create a comfortable microclimate, providing shelter, sunny aspects and shade?

Does the proposal include retaining (or provision of) natural areas and if so to what extent?

Is there the opportunity for the community to be involved in the design of a natural area or with its management?

Does the proposal protect and enhance existing priority habitats and species populations and provide for appropriate long-term management of wildlife habitat?

Does the proposal incorporate building design that makes the development more wildlife friendly?

h) Energy

Have measures been taken to minimise the consumption of energy?

Have measures been taken to reduce water consumption?

Have measures been taken to reduce water consumption?

i) Recycling

Has space been provided to store materials that can be recycled?

Has space been provided to store composting organic waste?

Appendix A: Example of an EcoHomes assessment

ISSUE		POINTS
Energy		
1	CO ₂ emissions from the building must be less than 60 kg/m ² a year.	2 to 20
2	The performance of the building must have improved by at least 10% above the standard set in Part L of the 1995 Building Regulations (or 3% improvement over Part L produced in 2002).	2 to 10
3	Space for drying clothes must be provided.	2
4	Appliances you provide should have an 'A' energy rating ('C' rating for dryers and washer-dryers).	2 to 4
5	Any outside lighting you provide should be low energy (that is, fluorescent light strips, or lights with sensors or timers, up to 150 watts).	2 to 4
Transport		
1	80% of the development should be within 1000m of a regular route of public transport.	2 to 4
2	Cycle storage should be provided for 50% of homes.	2 to 4
3	The development should provide, and be close to, walking routes to local facilities, such as food shops, post boxes, a post office, a bank, a chemist, a school, a medical centre.	2 to 6
4	You should have space and services (lighting, phone lines and electricity supply) for a home office.	2
Pollution		
1	No substances that damage the ozone must be used in building the development.	4 to 8
2	Boilers must give off no more than 150mg of nitrogen oxides (NO _x) per kWh.	4 to 12
3	The amount of surface water running off roads, pavements and roofs to either natural or built-up environments must be reduced by 50%.	4 to 8
Materials		
1	Over 30% of the timber used in the building process must be recycled, reused or come from a renewable forest (such timber carries the FSC mark).	2 to 6
2	Over 30% of the timber used in finishing to building (starting boards, window boards and so on) must be recycled, reused or come from a renewable forest (such timber carries the FSC mark).	1 to 3
3	Storage must be provided, inside and outside, for recyclable material.	2 to 6
4	The following elements must get an 'A' rating from the Green Guide for Housing: roof, inside and outside walls, floors, windows, hard landscaping (walls, patios and so on) and fencing.	1 to 16
Water		
1	Less than 50m ³ of water should be used for each potential member of the household each year.	3 to 15
2	There should be a system for collecting rainwater to be used for watering gardens.	3
Land use and ecology		
1	Developments should be built on land which is of low ecological value.	3
2	The ecological value of the site should be improved by consulting an approved expert.	3
3	Any existing ecological features on the site must be protected.	3
4	The number of plant and animal species on the site must be protected.	3 to 12
5	The number of cases with a particular difference (ratio) between the floor area (inside the external walls) and the building footprint (the area that all buildings, including the house/flat and garages, sheds and so on).	3 to 6
Health and wellbeing		
1	Buildings should let in adequate daylight in line with part 2 of BS8206.	4 to 12
2	Buildings should meet, or improve, the sound insulation standards set out in the Building Regulations approved document E (2003 Edition).	4 to 16
3	Private and almost-private space outside the home should be provided.	4