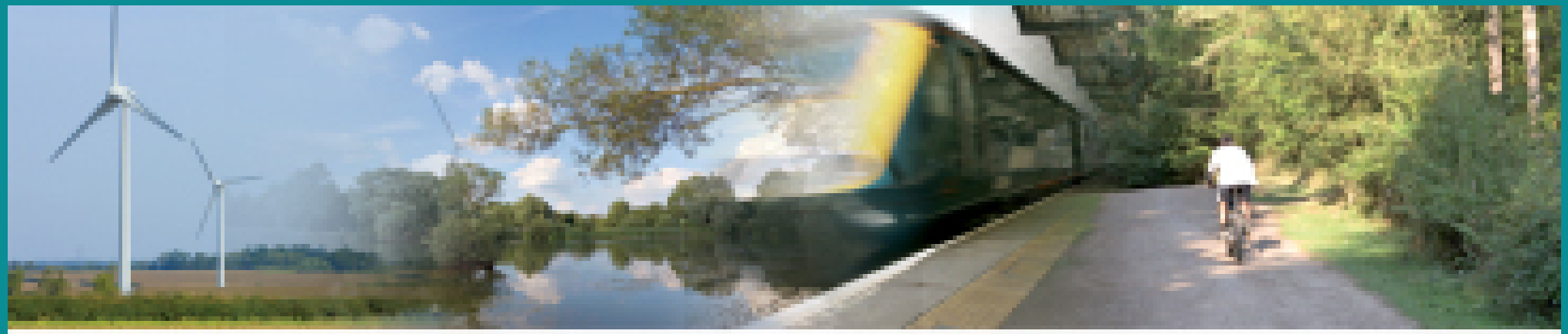


Sustainable Design Supplementary Planning Document

Corby

Northamptonshire County Council

Kettering Borough Council

Wellingborough

North Northamptonshire Joint Planning Unit

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A Introduction

Purpose

A.1 This guide has been prepared by the North Northants Joint Planning Unit on behalf of by the borough, district and county Councils of North Northamptonshire as a Supplementary Planning Document (SPD) under the Planning and Compulsory Purchase Act 2004. Supplementary Planning Documents (SPDs) are prepared under the Planning and Compulsory Purchase Act 2004. They are part of the Local Development Framework which delivers the spatial planning strategy for the area. Whilst they do not have the status of the statutory development plan they do have material weight in the consideration of planning applications. This Sustainable Design Supplementary Planning Document (SPD) is intended to provide guidance on policies within the North Northamptonshire Core Spatial Strategy that relate to design and sustainability. The checklist included in Appendix V of the SPD draws together the guidance set out and provides a framework for applicants for planning permission in producing Sustainable Design and Energy Statements.

A.2 It is acknowledged that guidance on sustainable design issues will affect different projects to varying degrees. As such, a list of common categories of development affected by this SPD has been identified in Table A.3 below under “How this Guidance Applies to Different Project Types”.

A.3 The SPD has four functions. Together, this should not only ensure good design for the future, but should speed up the processing and determination of planning applications.

- For applicants for planning permission and developers - To provide an understanding of expectations and requirements before preparing planning proposals or purchasing land. To assist in the justification of proposals and appraisal of development schemes and, to ensure any associated costs are considered in the business case for development.
- For designers - To provide a guide to assist with designing schemes, by clarifying the standards expected. To assist in the preparation of the Sustainable Design and Energy Statements and Design and Access Statements.
- For development control planners - To provide a systematic method to assist with determining planning applications and provide the basis for evaluating the effectiveness of policies and assist with the preparation of site briefs.
- Residential developments designed in accordance with this SPD will be well placed to be put forward for accreditation under the Building for Life Standard – see paragraph A.23 below. It is the aspiration of NNJPC that all residential developments achieve 'Silver' standard and developers are encouraged to submit projects for accreditation.

A.4 Although this SPD is a stand alone document, it is not a textbook and instead serves as a "gateway document" providing users with signposts to key documentation and information sources. Where issues are covered in greater detail elsewhere, this SPD has not sought to reproduce key information. For example, rather than attempting to synthesise information on green infrastructure and environmental characterisation, the reader is directed to the wealth of data and information available from the River Nene Regional Park (RNRP).

Submission Requirements

A.5 Where applicable (see Table A.3), applicants are required to submit a Sustainable Design and Energy Statement answering the relevant questions from this SPD. The checklist should accompany the Sustainable Design and Energy Statement, showing where the answer to each question can be found in the statement - see Table A.1 below. The checklist is intended to act as a referencing tool for use by the assessing authority throughout the duration of the application. Where a Sustainable Design and Energy Statement is not required, it is advised that the checklist forms the basis of the submission to accompany the planning applications - see table A.3.

A.6 The checklist in Appendix V is available as an editable word document, which can be saved and submitted electronically with planning applications.

A.7 In the event of a question not appearing relevant to the specific type of development applied for, the applicant may state 'not applicable', giving a reasoned justification for such a response. In the case of a Major Development where an application for Outline Planning Permission is submitted with some Matters Reserved the statement accompanying the application should explain how the applicant has considered the proposal and demonstrates an understanding of what is appropriate and feasible for the site in it's context. It should clearly explain and justify the principles that will be used to develop future details of the scheme.

REF	SPD Question	Location In Statement	Internal Use Only
Q 7.2	**Is car parking well integrated so it supports the street scene? (BfL 8)**	See Sustainable Design and Energy Statement para 3.5	
Q 2.1	**Are streets defined by a coherent and well structured layout?**	Layout is reserved for future approval, the outline application accompanying plans show the approximate location of buildings, routes and open spaces within the site	

Checklist example.

A.8 It is crucial that this information is submitted with certain types of planning application, as per Table A.3 below. Applications not accompanied by a Checklist and Sustainable Design and Energy Statement are unlikely to be registered. If information required for the determination of a planning application is missing from a Checklist or Statement, this information will need to be provided before the application can be determined

A.9 The Sustainable Design and Energy Statement should take the form of a report with accompanying plans and drawings to illustrate and expand on information contained in the checklist. Applicants are advised:

- To structure the report in the same order and under the same headings as the SPD and checklist
- To be clear at the beginning how the sustainable design issues are being quantified and measured (i.e. which tool or standard is being used, such as BREEAM or Code for Sustainable Homes).
- That the Sustainable Design and Energy Statement should demonstrate how the proposals address each of the issues set out in the checklist
- That sufficient details and calculations on proof of implementing the proposed measures will need to be provided and agreed with, in order for the Local Planning Authority to determine the planning application.
- That the Sustainable Design and Energy Statement should include pre-assessment estimators for Code for Sustainable Homes or BREEAM Non Domestic (or other environmental assessment method), demonstrating the achievement of the progressive environmental standards.
- That the Sustainable Design and Energy Statement should include a plan demonstrating the achievement of the progressive environmental standards in line with CSS Policy 14, where applicable.

A.10 With regard to energy, the statement should show the predicted energy demand of the proposed development the degree to which the development meets current energy efficiency policies and other requirements, and demonstrate the extent to which the proposal has taken account of the need to minimise the consumption energy resources and maximise the use of sustainable or renewable resources. Energy statements should therefore set out those measures specific to the scheme, demonstrate the extent to which they exceed building regulations and show how energy efficiency is fundamental to the design.

A.11 Conditions and S106 obligations will be set where necessary to ensure that these requirements are met.

A.12 The government circular 08/05-Guidance on changes to the development control system explains when Design and Access (D&A) statements are needed but in general they must be provided with most planning applications except house extensions. D&A Statements, required by law, help applicants demonstrate how design principles and concepts have informed the development and how access issues have been dealt with. The Sustainable Design and Energy Statement may cross reference information in the Design and Access Statement and elsewhere in the application. However, a summary of this information should be provided in the Sustainable Design and Energy Statement to assist in assessing the information against the checklist - see table A.2 below.

REF	SPD Question	Location In Statement	Internal Use Only
Q 5.3	**Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness?**	Please refer to Design and Access Statement section 2. Please refer to Sustainable Design and Energy Statement para 2.3.	

Checklist example 2.

How this Guidance Applies to Different Project Types

A.13 Guidance on sustainable design issues will be relevant to different projects to varying degrees. A list of categories of development and submission requirements has been identified in Table A.3 below. Where a type of development does not appear on the list, the SPD and checklist are not relevant – for example, Change of Use (No operational development); sign/adverts; tree or hedgerow works; or lawful development certificates.

Type of Development	Checklist Requirement	Sustainable Design and Energy Statement Required?
Residential extensions including garage conversions, summer houses and outbuildings.	Consult the SPD and local planning authority for guidance on key issues of relevance (For example character and adaptability and environmental sustainability).	No
Listed Building Consent	Consult the SPD and local planning authority for guidance on key issues of relevance (For example character).	No
Conservation Area Consent	Consult the SPD and local planning authority for guidance on key issues of relevance. (For example character).	No
Change of Use (Operational development)	Complete all parts of checklist (where not considered relevant a reasoned justification should be provided)	Yes
Full Planning Application Commercial development including extensions	Complete all parts of checklist (where not considered relevant a reasoned justification should be provided)	Yes
All Planning Applications 1 or more dwellings	Complete all parts of checklist (where not considered relevant a reasoned justification should be provided)	Yes
All Planning Applications Mixed use developments	Complete all parts of checklist (where not considered relevant a reasoned justification should be provided)	Yes

How this Guidance Applies to Different Project Types

Context

A.14 This SPD has been prepared by the North Northamptonshire Joint Planning Unit (JPU) on behalf of the North Northamptonshire Joint Planning Committee (JPC) and the individual planning authorities of Corby, East Northamptonshire, Kettering and Wellingborough. The focus of this document is upon ensuring that national, regional and local sustainability objectives, policy requirements and targets can be better understood and more importantly responded to in North Northamptonshire.

A.15 A key objective for North Northamptonshire, as expressed in the North Northamptonshire Core Spatial Strategy (CSS) is for the area to become a beacon of best practice and a benchmark for green living and safe, healthy communities through using the highest standards of design, sustainable construction methods and green technology. Growth in the region, identified through the East Midlands Regional Spatial Strategy (RSS8), presents a unique opportunity to initiate such a step change in the quality of development and delivery of environmental improvements. Emerging priorities in the context of climate change, energy efficiency and health mean that design considerations play an important part in delivering sustainable development. To help achieve this beacon status, this SPD provides guidance for planners, applicants for planning permission, consultants, developers and all other interested parties.

A.16 This SPD sets out the contribution that needs to be made by those involved in designing and constructing new developments. It should assist in the creation of high quality developments that are cheaper to run, more secure, provide healthy living conditions, respect the area's rich natural heritage and distinctiveness and have the minimum environmental impact. In meeting these requirements, developments in North Northamptonshire should also provide for the everyday needs of residents.



A Building for Life Gold Standard Development - Accordia, Cambridge.
Copyright - David Millington Photography Ltd

A.17 Research undertaken on behalf of the Commission for Architecture and the Built Environment (CABE) suggests that good urban design adds value by increasing the economic viability of development and by delivering social and environmental benefits [(1)]. The message is also that good urban design does not necessarily cost more or take longer to deliver, as long as such issues are considered early on in the formulation of development proposals.

Sustainable Design

A.18 Sustainable design relates to how individual buildings, spaces and settlements can meet the objectives of sustainable development. Sustainable development is: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission Report, 1987.) The principles and objectives of sustainable development lay at the heart of the UK planning system, with national, regional and local policy all advocating development which meets the economic, social and environmental goals of sustainable development. The policy and legislative context for this SPD is provided in Appendix II.

1 The Value of Urban Design (CABE 2001) Thomas Telford Ltd (ISBN 0 7277 2981 0)

A.19 Good urban design is a key concept in delivering the Government's Sustainable Communities Plan (2003). The government produced Planning Policy Statement 1: Delivering Sustainable Development states that good design is indivisible from good planning, and indicates that the onus should be on developments being good enough for Local Planning Authorities to approve. This concept is reiterated and elaborated on in East Midlands Regional Spatial Strategy (RSS8) which notes that high quality design is a key planning consideration and that issues such as climate change and resource efficiency need to be incorporated into design approaches.

A.20 The North Northamptonshire Core Spatial Strategy (CSS) sets the context for how new development can be designed to meet the imperatives of sustainable development in the region. This SPD amplifies, and will aid the implementation of the CSS policies relating to general sustainable development principles, design, energy efficiency, sustainable construction, sustainable housing provision, environmental character and green infrastructure.

A.21 'By Design – Urban Design in the Planning System' (CABE 2000) provides guidance and good practice to Local Authorities, developers and clients in relation to urban design. It sets out principles of good urban design that should be sought to create a successful place. Building on these principles and the policy basis provided by PPS1, RSS8 and the CSS, this SPD introduces principles of "Sustainable Design", to guide environmental sustainability and good urban design in the context of North Northamptonshire – these principles are listed in table A.4 below.

A.22 Part 2 of the SPD is divided in to seven sections under the principles of Sustainable Design. Within each section questions have been included that seek to draw out the sustainable design solutions relevant to schemes. Each section includes questions relevant to both residential development and non-residential development. Guidance is provided in the form of "Issues to consider", including matters specific to North Northamptonshire. Links to relevant information on each section are provided in Appendix VI - Further Reading. It is the intention that this appendix will be updated annually by individual planning authorities to ensure that the most up-to-date information is available.

Principle	Explanation
Character A place with its own identity	To promote character and identity in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, built heritage, culture, landscape and living sustainably.
Continuity and enclosure A place where public and private spaces are clearly distinguished	To promote the continuity of street frontages and the enclosure of space by development which clearly defines private and public areas.
Ease of movement A place that is easy to get to and move through	To promote accessibility by making places that connect with each other and are easy to move through, encouraging people to use sustainable modes of transportation and contributing to the reduction of energy usage and carbon dioxide emissions. Transportation routes should be resilient to changing environmental conditions.
Legibility A place that has a clear image and is easy to understand	To promote legibility through development that provides recognisable routes, intersections and landmarks to help people find their way around; contributing to social/community development and encouraging people to move around easily by sustainable modes of transport.
Adaptability, resilience and environmental sustainability A place that is resilient and can change easily	Developments should contribute towards resource and energy efficiency (production and use); environmental sustainability including flood risk management and biodiversity and species movement; and promote adaptability through development that can respond to changing social, technological and economic conditions.
Diversity A place with variety and choice	To promote diversity and choice through a mix of compatible developments and uses that work together to create viable places, thereby minimising the need to travel long distance and contributing to the reduction of transport energy usage and carbon dioxide emissions.
Quality of the public realm A place with attractive, sustainable and successful outdoor areas	To promote public spaces and routes that are attractive, safe, work effectively for all in society, and contribute to environmental sustainability including flood risk management and biodiversity and species movement.

Principles of Sustainable Design

Building for Life Standard

A.23 Under the umbrella of the principles of Sustainable Urban Design, CABE's "Building for Life Standard" has been utilised to develop this SPD and accompanying checklist. The Building for Life standard is the national benchmark for well-designed housing and neighbourhoods and is awarded to new housing projects that demonstrate a commitment to high design standards and good place making. However, although Building for Life is designed to be applied to residential development, for the purposes of this SPD, the issues and criteria identified through the standard have been translated into requirements specific to North Northamptonshire for all types of development including residential, commercial, agriculture and leisure and tourism. Where appropriate, additional questions to those identified through the Building for Life standard have been included. It is the aspiration of NNJPC that all residential developments achieve 'Silver' standard and developers are encouraged to submit projects for the Building for Life standard, however please note that a significant proportion of the scheme needs to have been built to be considered for a Building for Life standard.

BUILDING FOR LIFE

A.24 Building for Life questions can be identified in the checklist by the initials BfL, plus the relevant number. By following the SPD, residential schemes will be well placed to achieve accreditation via the Building for Life Standard. Any Building for Life submissions should be made to independently to CABE. Further details on how this process works can be found at www.buildingforlife.org.uk.

A.25 The requirements of this SPD are separate from the Building for Life Standard. Applications will be assessed using the SPD's checklist on a case-by-case basis against each of the questions included in Part 2. The relevant Local Planning Authority will determine the significance of particular questions for particular projects during the consideration of the application.

1 Character

"A place with its own identity"

To promote character and identity in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, built heritage, culture, landscape and living sustainably.

Question 1.1

Does the scheme feel like a place with a distinctive character?

Issues to consider:

- Have locally distinctive features and character been incorporated into the design?
- Are the distinctive characteristics of local townscape understood and reflected in the design?
- Does the scheme reinforce a strong positive image of its location?
- Is there a variety of building types/landscapes and form that make the scheme special?
- Does the scheme embrace sustainable technologies and innovative design which also contributes to the character of the surrounding area (e.g. green roofs)?

1.1 Designing for local distinctiveness, character and identity has implications for the types and forms of development that can be successfully integrated in to the existing environment. It is essential that new development, and alterations to existing developments, respond to and reinforce locally distinctive patterns of development, landscape and culture. An understanding of the character of the historic environment is considered an integral part of the development and design process. Historic environments and local landmarks can help give a neighbourhood or area a strong sense of identity, attracting residents and investors. In addition, innovative contemporary building design, which respects the local character, is encouraged. Individual building design approaches, such as green roofs, can also contribute to local distinctiveness. Local ecology, materials and geomorphology can help to determine the character, identity and sustainability of both a development and the place of which it is a part. Such approaches can be thought of as living in harmony with the natural environment or “living sustainably” and can contribute to the environmental sustainability of settlements and have a positive effect on the identity and character of areas.



Building for Life Silver Standard development - Allertaon Bywater, Castleford.
Copyright - Ivor Samuels

1.2 It is acknowledged that the progression through the higher levels of the Code for Sustainable Homes and movement to a zero carbon society will see a move from the more traditional designs that populate the existing urban and rural environments.

1.3 The Northamptonshire Environmental Characterisation Strategy (ECS) provides a suite of core environmental datasets that describe the physical environment of Northamptonshire to help planners, developers and the community to understand how the present day landscape has evolved and how it functions. It provides clear guideline for each of the three major landscape components: the historical, ecological (biodiversity) and modern. The ECS is an online tool available using the following link: www.rnrpenvironmentalcharacter.org.uk/.

1.4 On the website, users are given guidance on how to use the suite. By clicking on a map of your site or area of interest, you can either go straight to the relevant assessment for detailed understanding of your site or area, or to the Strategy and Guidelines for a summary of the areas characteristics and guidance on appropriate change and management.

1.5 In historic areas, urban form characterisation should inform the design of new development. Ensuring that the overall look and feel of a new development is based on an understanding of the way the local area looks and works. English Heritage guidance on these issues " Conservation Principles, Policies and Guidance for Sustainable Management of the Historic Environment (April 2008)" can be viewed using the following link - www.english-heritage.org.uk/upload/pdf/Conservation_Principles_Policies_and_Guidance_April08_Web.pdf

Question 1.2

Do buildings exhibit architectural quality?

Issues to consider:

- Does the design reflect positive characteristics of built form in the surrounding areas (including building design, materials, layout, form, style etc)?
- Are elevations well composed and detailed, taking into account the rhythm of the street scene?
- Does the architectural response strive for excellence and reflect a step-change in design quality?

1.6 Good architecture works well for its intended use. Building design should be well thought through and cater for the needs of the users. Good architecture involves the successful co-ordination of proportions, materials, colour and detail, which should reflect existing positive characteristics of the area. For example, "Building on Tradition – The Rockingham Forest Countryside Design Summary", prepared by the Rockingham Forest Trust identifies ways in which new development can be designed to harmonise with and enhance local character in the region. Any proposals for development within the Forest must demonstrate that account has been taken of the context in which it is to be situated and must show and appreciation and understanding of the context.

Question 1.3

Does the scheme exploit existing buildings, landscape or topography?

Issues to consider:

- Have important existing features, views and links to the wider area been protected and enhanced?
- Are any existing features or architectural, historical, ecological, landscape or recreational value on the site adequately protected and incorporated within the design?
- Does the scheme consider its relationship with the wider surrounding rural areas and villages?

1.7 Features such as orientation, topography and location of a site can have a major influence on the layout of sites and character of the built form. For example, incorporating natural areas to aid flood risk and biodiversity management; and planning for energy efficiency in relation to solar orientation, prevailing winds and landscaping.

Question 1.4

Is the design specific to the scheme?

Issues to consider:

- Have the physical characteristics of the site been taken into account in the layout and development?
- Does the development, whilst making the most efficient use of land, have regard to its location and the densities and layout of built form and materials in adjacent areas?
- Does the scheme exhibit an unique/identifiable character, whilst having regard for local area more generally?

1.8 The overall look and feel of a new development should be considered in relation to neighbouring buildings and the local area more generally, based on an understanding of the way the local area looks and works.



Integration of innovative design with adjacent building - Cronos, London.
Copyright - Ashley Bingham and Mark Ellis at A&M Photography

Further Information:

Relevant documents and further reading on Legibility is provided in Appendix VI and is available as a separate document.

2 Continuity and Enclosure

“A place where public and private spaces are clearly distinguished”

To promote the continuity of street frontages and the enclosure of space by development which clearly defines private and public areas?

Question 2.1

Are streets defined by a coherent and well structured layout?

Issues to consider:

- Are spaces at the front of building properly defined, usable and attractive?
- Does the design achieve an appropriate balance between the size of space and the height of buildings which contain it?
- Are street widths appropriately scaled to complement the heights of buildings?

2.1 All streets, buildings, gardens, places for leisure, and parking must be arranged to create a clear distinction between areas that are public and areas that are private or communal. This can be achieved by arranging buildings to follow a continuous line and by creating active edges with doors and windows opening onto the street, which also increases surveillance.

2.2 In this connection, all planning applications that are submitted must have due regard to planning out crime at the design stage and it will be required that evidence of this forms part of the planning application. A provisional Secured By Design Certificate is encouraged as an appropriate way of submitting this evidence. The “Secured By Design” (SBD) award is accredited by Northamptonshire Police. SDB recognises good surveillance as a key principle in mitigating crime, disorder and fear of crime. Schemes should also seek to implement the principles of the “Planning Out Crime in Northamptonshire” Supplementary Planning Guidance.

Question 2.2

Are public spaces and pedestrian routes overlooked and do they feel safe?

Issues to consider:

- Do buildings address the street and public spaces positively with active, diverse and coherent frontages?
- Does the design/layout encourage natural surveillance?
- Is play space overlooked by houses?
- Does the design/layout promote a sense of safety and security?
- Are schemes purposely designed to increase safety and security?

2.3 The structure of the built and natural environment is fundamental to ensuring the safety and security of any area. Developments should be planned in a way that makes sure buildings overlook all public spaces, roads and footpaths to increase surveillance. Examples of this include windows and doors opening onto streets and footpaths, careful consideration of lighting, and avoiding blank walls that face onto public spaces.

Question 2.3

Are private spaces well designed with respect to their intended user?

Issues to consider:

- Does the design provide adequate standards of outdoor space for dwellings appropriate for their type, size and location?
- Are the boundaries between public and private spaces clearly defined?
- Does the design provide adequate facilities for waste storage and parking, whilst maintaining adequate well designed outdoor space?



Building for Life Gold Standard development - Chapel, Southampton
Copyright - Mark Ellis and Ashley Bingham ICD Ltd

2.4 Private space is important as it provides many functions, for example storage for bins and bicycles, areas for play and areas in which to dry washing. It is important that private spaces such as back gardens do not face onto street frontages, and instead back onto other private spaces in order to maintain security and keep frontages as active as possible.

Further Information:

Relevant documents and further reading on Legibility is provided in Appendix VI and is available as a separate document.

3 Ease of Movement

"A place that is easy to get to and move through"

To promote accessibility by making places that connect with each other and are easy to move through, encouraging people to use sustainable modes of transportation and contributing to the reduction of energy usage and carbon dioxide emissions. Transportation routes should be resilient to changing environmental conditions.

Question 3.1

Does the scheme integrate with existing roads, paths and surrounding development?

Issues to consider:

- Are the routes well connected with each other and with those around the site, forming a grid or network that allows people to go where they want to go, allowing circulation around the scheme and into adjacent areas?
- Does it provide direct, convenient routes which follow natural desire lines avoiding unnecessarily tortuous routes and cul-de-sacs?
- Does the scheme accord with the requirements of Northamptonshire County Council's Transport Strategy for Growth (TSfG)?



Accordia, Cambridge. Copyright - David Millington Photography

3.1 Residential areas should be designed using a permeable, grid based (rigid or deformed) layout, which enables vehicular journeys to be minimised and walking and cycling are encouraged. A well-designed urban structure has a network of connected spaces and routes, for pedestrians, cyclists and vehicles. Such settlement patterns, when combined with appropriate densities and mixed uses, can encourage residents and users to use sustainable modes of transport including walking, cycle and public transport and reduce automobile trip distances and frequency, thereby contribute to modal shift and the reduction of energy usage and carbon dioxide emissions. See section "6: Diversity" for more guidance on density and mixed use.

3.2 Manual for Streets (DFT 2007) shows how the design of residential streets can be enhanced and how street design can help create better places – places with local distinctiveness and identity. In addition, it establishes a common reference point for all those involved in the design of residential neighbourhoods. Northamptonshire County Council are producing a Design Guide to translate the principles of the Manual for Streets into the local context.

3.3 The Northamptonshire Transport Strategy for Growth (TSfG) has been developed from a suite of documents which set out strategic proposals for the County as part of the wider Milton Keynes and South Midlands Sub-Region, as well as a strategy for encouraging modal shift, and town Strategies aimed at delivering and supporting growth in each of the growth towns. Developments must adhere to the principles outlined in the TSfG and seek to contribute to the goal of modal shift and promote sustainable modes of transport.

Question 3.2

Does the building layout take priority over the roads and car parking, so that highways do not dominate?

Issues to consider

- Has a balance been struck between the desire of car owners to park as near to their dwellings as possible and the need to maintain the character of the overall scheme?
- Are some residential streets designed primarily as pedestrian environments, e.g. homezones, with areas for sitting, children's play and parking?

Question 3.3

Are the streets pedestrian, cycle and vehicle friendly?

Issues to consider

- Does the design place a high priority on meeting the needs of pedestrians, cyclists and public transport users, so that growth in these modes of travel is encouraged?
- Have streets been designed to accommodate a range of vehicles from private cars, with frequent access requirements, to larger vehicles such as delivery vans, emergency services and waste collection vehicles needing less frequent access?

3.4 The convenience, safety and comfort with which people go to and pass through buildings, places and spaces play a large part in determining how successful a place will be. Streets are more than just traffic channels for vehicles, and should offer a safe and attractive environment for all. A well connected network of streets also contributes to personal safety and security of property by encouraging pedestrian thereby providing natural surveillance and a degree of self-policing. Well-designed streets encourage people of all ages and abilities to use them, and make going outside a safe and pleasant experience.

Question 3.4

Does the development have easy access to public transport?

Issues to consider:

- Does it provide direct, safe and attractive connections between public transport, footpath and cycle routes and local facilities?

3.5 Ensuring communities have easy access to public transport can contribute to the goal of modal shift i.e. reducing car journeys and encouraging the use of more sustainable modes of transport. In terms of indicative distances 'ped sheds' can reduce the energy consumed by the transport network and carbon emissions. Main arterial public transport routes can be used to link together communities that are within easy walking distance of transport hubs (circa 800 metres). Higher densities are used closer to the hub so as to reduce the average walking distance for members of the community (TCPA 2007) Sustainable Energy By Design.

Question 3.5

Are transportation routes resilient to changing environmental conditions?

Issues to consider:

- Does the transportation network take into account issues of flood risk management and access to servicing e.g. communications and energy supplies, now and in the future?
- Does the scheme consider the management of development surface water run-off?
- Does the scheme considered innovative approaches to drainage, including a mix of traditional and sustainable techniques, and the link between hard and soft landscaping.

3.6 Transportation routes should be robust and resilient to changing conditions. This is particularly important considering the growing threat of climate change, for example the need to ensure roads are resilient to flooding. Guidance and best practice on combining hard and soft landscaping is provided by the Environment Agency endorsed ESPACE project - Toolkit for Delivering Water Management Climate Change Adaptation Through the Planning System (2005) - www.espace-project.org/Library/Outputs_Tools.htm

3.7 There is also a need to ensure that the construction of transportation routes and service corridors considers the need to accommodate emerging technologies for energy supply and communications.

Further Information:

Relevant documents and further reading on Legibility is provided in Appendix VI and is available as a separate document.

4 Legibility

“A place that has a clear image and is easy to understand”

To promote legibility through development that provides recognisable routes, intersections and landmarks to help people find their way around; contributing to social and/community development and encouraging people to move around easily by sustainable modes of transport.

Question 4.1

Do buildings and layout make it easy to find your way around?

Issues to consider:

- Does the pattern of routes reflect local topography with streets laid out according to natural features as well as prominent landmarks?
- Does the scheme promote walking and cycling through the creation of routes which are easy to navigate?
- Have landscaping features, such as mature been incorporated or retained.
- Do street widths and character contribute to the identify of the scheme and aid navigation.

4.1 The idea that places should be easy to comprehend and move through involves the idea that users understand areas through a process of constructing mental maps using abstracted elements such as nodes, edges, paths, landmarks and districts. A development should have a clear identity and be easy to understand for residents, employees and visitors.

4.2 Such settlement patterns can encourage people to move around easily by sustainable modes of transport, such as walking and cycling. Areas that are easier to get around tend to be more active and vibrant, contributing to the social and economic vitality of areas and engendering a feeling of safety and security.

4.3 Navigation can be improved by creating landmarks and focal points, views, clear routes, gateways to particular areas, lighting, works of art and signs. Sustainable design solutions, such as wind turbines, innovative building designs and open space can contribute to such an approach. Natural landscape features, such as mature trees can also act as landmarks within and around developments. A heirachy of streets can also help navigation, with different widths and character identifying the purpose of streets. For example, some may have a more intimate character, whilst other can be wider and more open.



Burton wold Wind Farm near Kettering

26 Legibility

Further Information:

Relevant documents and further reading on Legibility is provided in Appendix VI and is available as a separate document.

5 Adaptability, Resilience and Environmental Sustainability

"A place that is resilient and can change easily"

Developments should contribute towards resource and energy efficiency (production and use); environmental sustainability including flood risk management and biodiversity and species movement; and promote adaptability through development that can respond to changing social, technological and economic conditions.

Question 5.1

Do internal spaces and a layout allow for adaptation, conversion or extension?

Issues to consider:

- Does the scheme accord with the principles of Lifetime Homes?
- Does the scheme incorporate flexibility for changes in the use of buildings and spaces?
- Are buildings future-proofed?

5.1 Places should be adaptable at every scale. Dwellings should be capable of adapting to the needs of the occupants, for example extensions, changing economic circumstances such as converting to a shop or office, or the need for wheelchair accessibility. Similarly, towns and cities should be adaptable to changing economic, environmental and technological conditions. Well designed places are adaptable to such circumstances and developments that endure often have flexible layouts and design. Buildings that are located in areas that have the potential to be changed to non-domestic uses should have flexible ceiling heights (4m) to allow retrofitting of plant (lighting and ventilation).

5.2 Developments are also required to meet the requirements of CSS Policy 14, which seeks the highest viable standards of environmental performance in all developments. Larger scale developments including the Sustainable Urban Extensions provide the opportunity to secure exemplary standards of sustainable design and renewable or low carbon energy generation. Policy 14 (a) requires large* new residential developments to meet the levels of the Code for Sustainable Homes necessary to deliver the three steps to achieving zero carbon emissions by 2016; and requires a BREEAM performance standard of not less than 'very good' for non-residential development forming part of large [1] scale

1 Large developments referred to in this policy include developments of 200 or more dwellings for residential developments

mixed-use developments. Elsewhere non-residential development of 2000sqm or more should also achieve BREEAM 'Very Good'. Guidance on achieving the CSH Level 3 and BREEAM 'Very Good' are provided by the respective organisations (see further reading below). For ease of reference, an example for achieving Code Level 3 and information on BREEAM standards is included in Appendices III and IV respectively.

5.3 Policy 14 Part (b) of the Core Spatial Strategy covers development that does not fall under Policy 14 Part (a). Such development should seek to incorporate sustainable design solutions for addressing construction, energy and water efficiency, recycling, biodiversity and other considerations. The strategic layout of development (including both residential and non-residential schemes) should also contribute to environmental sustainability by considering issues such as green infrastructure, flood risk, biodiversity movement and opportunities for community recycling. The strategic layout and design of developments should also be adaptable and facilitate changing technological and environmental conditions, including opportunities for alternative energy supplies. The following questions provide an opportunity to demonstrate that the issues above have been addressed. Where the following issues are covered by adherence to the Code for Sustainable Homes or BREEAM, this should be indicated in appropriate section of the checklist in Appendix V.

Question 5.2

Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness?

Issues to consider:

- Does the scheme utilise modern methods of construction (MMC), such as straw bales and cob?
- Does the scheme allow for the introduction of alternative energy sources and provision of other utilities?
- Does the scheme have a strategy for reducing construction waste and – where possible - utilise reclaimed or recycled materials (Site Waste Management Plan)?
- Are new construction materials capable of being recycled in the future?

5.4 Modern methods of construction (MMC) refers a range of technologies and techniques involving various forms of supply chain specifications, prefabrication and off-site assembly in the building industry. MMC makes use of more effective materials, speeds up housing delivery, enables high standards of design quality and can help to reduce resource consumption. It is increasingly regarded as a means of improving quality, reducing time spent on site, improving on-site safety and overcoming skills shortages in the construction of housing. Examples of systems that are considered as advanced forms of construction include prefabricated elements such as 'thin joint blocks' (glued brick panels), fast track foundations or advanced methods of cladding. English Partnerships guidance on Modern Methods of Construction can be viewed using the following link - http://www.englishpartnerships.co.uk/mmc.htm

5.5 Originally developed as a DTI Voluntary Code of Practice, Site Waste Management Plans provide a structure for systematic waste management at all stages of a project's delivery. These plans became a legal requirement for all construction projects over £300,000 in April 2008. With unused building materials that reaches figures of well into millions of tonnage, being discarded as waste every year, it is set to have a major impact on the industry. Guidance on site waste management is also provided in the Development and Implementation Principles SPD (NCC 2007).

Question 5.3

Does the scheme incorporate on-site renewable energy generation or a decentralised energy supply and incorporate energy conservation and energy efficient design measures?

Issues to consider:

- Are buildings and spaces designed to reduce energy consumption using modern technology and various building design techniques?
- Have renewable/low carbon energy sources been maximised?
- Are buildings future proofed to allow future addition of renewable/low carbon energy sources?
- Core Spatial Strategy policy requirements.

5.6 Energy savings can be achieved by incorporating better insulation into buildings, reducing heat losses by increasing airtightness of the structure, designing the building to utilise passive solar gain and installing an efficient central heating system. The installation of a Building/Energy Management System could also be considered. The energy hierarchy establishes the priority for all energy-related issues, and the development should reflect this prioritization, to reduce a building's carbon footprint, it is important that this simple energy hierarchy is used

5.7 Firstly, the design of the building must minimise the need for energy in its operation. This includes reducing heat loss through effective insulation, avoiding cooling requirements and improving air quality through natural, passive ventilation and utilising natural daylight for lighting

5.8 Secondly, the operation of the building must minimise the need for energy and provide the building users with energy saving measures. Low energy light bulbs and A rated appliances are essential low carbon measures, but the behaviour of the buildings occupants is one of the most important factors in reducing global warming.

5.9 Finally, on-site renewables from any source can be considered. Displacing a percentage of an energy efficient building’s carbon footprint using onsite renewables requires considerably less technology than it would in a building where energy efficiency has been ignored. Following this energy hierarchy is the most cost effective way to obtain maximum carbon reductions in the built environment.

5.10 In meeting the renewable/low carbon energy requirement of the CSS, a range of approaches available include:

- solar water heating panels
- photovoltaic panels for electricity
- biomass/wood fuel heating or biomass CHP
- wind turbines
- ground, air and water source heating & cooling.



Building for Life Gold Standard development - Selwyn Road, Oldam.
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5.11 The proportion of energy from renewable and low carbon sources is determined after the reduction in demand due to efficiency measures has been calculated. For large developments, a target of at least 30% of the demand for energy will be met on site (the actual figure to depend upon technical and economic viability), and 10% for other developments, as set out in Policy 14. For the large developments at least 10% is to be provided from renewables as calculated above in the energy assessment.

5.12 At a building level, energy use is defined as Delivered Energy i.e. quantity of energy in kWh that is measured at the incoming electricity or gas meter (or equivalent for other fuels). Calculation must include all fuels used for space heating, hot water, lights, cooking and other appliances. Embodied energy and transport are not included. Methods should follow those used for the Building Regulations Part L (i.e. SAP), plus use of the BRE Domestic Energy Model (BREDEM) for the appliances element, which is not covered by Building Regulations. SAP plus BREDEM is the method used by the Energy Efficiency Best Practice and the NHER (National Home Energy Rating) systems. Suitable results can be obtained at an early stage by using a number of representative dwelling types from the developers standard specification or by using results already calculated for existing similar developments.

5.13 The renewable energy equipment will for practical reasons usually need to be located on-site but nearby off-site locations may be possible, district heating or CHP will be required to meet the higher Code levels. This means only technologies directly serving the application site, not via the national grid, i.e. a decentralised energy supply as defined in the supplement to PPS1. Reliance on green electricity tariffs is not acceptable as there is no control over future occupants switching to other tariffs. London Renewables Toolkit is recommended for further information on estimating energy needs, outputs and costs but system design and sizing is a specialist activity and expert guidance should be sought.

5.14 The supporting Sustainable Design and Energy Statement should show the predicted energy demand of the proposed development, the degree to which the development meets current energy efficiency policies and other requirements, and demonstrate the extent to which the proposal has taken account of the need to minimise the consumption energy resources and maximise the use of sustainable or renewable resources.

Question 5.4

Does the scheme have appropriate water conservation measures?

Issues to consider:

- Does the scheme contribute towards delivering a strategic approach to wastewater infrastructure? (refer to North Northants outline water strategy).
- Does the design consider minimising the amount of non-porous hard surfacing to enable infiltration of run-off?
- Does the scheme include creation of swales and filter strips within landscaped areas to reduce the volume of piped surface water run-off?
- Does the scheme propose use of water efficiency measures in relation to the building (low water use appliances and/or water recycling)?
- Does the design minimise the amount of non-porous hard surfacing to enable infiltration of run-off (including permeable paving)?

Question 5.5

Does the scheme have appropriate flood-risk management strategies?

Issues to consider:

- Does the design retain natural watercourses without culverting or canalization, and include plans for restoration of such features?
- Does the design minimise the amount of non-porous hard surfacing to enable infiltration of run-off (including permeable paving)?
- Does the scheme include creation of swales and filter strips within landscaped areas to reduce the volume of piped surface water run-off?
- Are there open balancing ponds and facilities for rain water collection with the proposals?
- Have green infrastructure assets been designed to contribute to flood risk management strategies?



Building for Life Silver Standard Development - Upton, Northampton.
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5.15 Developments should demonstrate that strategic solutions to flood risk, water resources and wastewater infrastructure are addressed, and that any such infrastructure is not piecemeal. This will ensure that it is environmentally sound and will not prejudice the progression of necessary strategic infrastructure. The North Northants Outline Water Cycle Strategy provides guidance on such issues, and will be supplemented by a Phase Two Water Cylce Strategy that will contain key information to enable this approach.

Question 5.6

Does the scheme promote waste management and recycling?

Issues to consider:

- Does the design identify appropriate waste management facilities and design features (internal and / or external)
- Does the design demonstrate how the provision of waste management facilities and design is in accordance with the Principles for the Provision of Waste Management Facilities as provided in the Northamptonshire Development and Implementation Principles Supplementary Planning Document?

5.16 The Northamptonshire Development and Implementation Principles: Supplementary Planning Document provides detailed guidance to assist in the implementation of specific policies from the adopted Waste Local Plan. It provides guidance on how different scales of development (both residential and non-residential) can contribute to the separation, storage and collection of waste to increase the efficiency of its subsequent re-use, recycling and treatment. It covers standards for individual 'Householder Development'; 'Medium Development' (including 1-100 dwellings); and 'Neighbourhood Development (including 100 dwellings or more).

Question 5.7

Does the scheme incorporate green infrastructure and ecological considerations?

Issues to consider:

- Have green spaces been incorporated into the scheme providing new and existing communities with opportunities for recreation? (in accordance with relevant standards).
- Do developments allow space for allotments, community orchards and edible landscaping (the use in planting schemes of plants that produce food in place of more commonly used ornamental plants)?
- Has the scheme sought to conserve and enhance biodiversity by incorporating biodiversity and geological interest, and where possible creating new habitat consistent with the requirements of PPS9 and RSS (adopted and emerging)
- Does the scheme reflect the broad landscape character as outlined by the Northamptonshire Environmental Characterisation Strategy (RNRP 2005)?
- Does the scheme incorporate local and strategic green links in line with the Northamptonshire Green Infrastructure Strategy (RNRP 2005)?
- Does the scheme incorporate other measures that contribute towards biodiversity enhancement, such as green roofs?
- Does the scheme incorporate green infrastructure that delivers against renewable energy targets such as managing and harvesting woodlands for wood fuel?

5.17 The planning, design and management of green infrastructure in North Northamptonshire should incorporate native species, and traditional management approaches (such as meadow cutting and coppicing) within green space wherever this does not conflict with local character. Greenspaces should reflect the landscape and heritage character of the area and reflect design/style of the areas settlements. The incorporation of fine-grain elements of green infrastructure and other measures that contribute towards biodiversity enhancement, such as sustainable drainage systems, green roofs, allotments, orchards, edible landscaping are all ways in which new developments can contribute to the protection and

enhancement of the green infrastructure network and biodiversity, as well as local character and distinctiveness. Such schemes should be designed with the community to encourage community cohesion and a sense of ownership, and co-located with other community infrastructure wherever possible.

Question 5.8

Does the scheme make use of recycled land and/or material?

Issues to consider:

- Does the site occupy a site that was previously developed?
- Are existing buildings on the site re-used or their material reclaimed for use within the development?
- Do remediation options, where appropriate, include sustainable on-site schemes utilising on-site treatment and re-use of soils.

5.18 Previously-developed land, often called brownfield land, is land that was developed but is now vacant or derelict, or land currently in use with known potential for redevelopment. Taking advantage of such opportunities can contribute to regeneration and reduce the need to develop greenfield sites.

5.19 Opportunities should also be take to re-use existing buildings. Where this is not viable, the recycling potential released in the re-use of lime mortared bricks, timber, clay tiles and hardcore can contribute to reducing costs and sensitivity to context.

Question 5.9

Are buildings orientated and designed to maximise levels of solar gain, daylight and natural ventilation?

Issues to consider:

- Are the buildings and open space orientated to maximise daylight, passive solar gain and sunlight?

Question 5.10

Does the development work with the natural features of the site?

Issues to consider:

- Are buildings located in sheltered location, protected by landform or planting where necessary and where they do not create wind tunnels or uncomfortable micro-climates?
- Does the design take account of local climatic conditions, avoiding frost hollows and exposed parts of the site to reduce energy use?

5.20 Sustainable design solutions for developments should seek to embrace and harness intrinsic site assets and resources, such as existing development form, soils and geology, drainage, landscape, solar and wind energy. A thorough investigation of the sites natural resources will lead to a design response that integrates the various needs of the new development and recognises the sites possibilities and limitations.

Further Information:

Relevant documents and further reading on Adaptability, Resilience and Environmental Sustainability is provided in Appendix VI, which is available as a separate document.

6 Diversity

“A place with variety and choice”

To promote diversity and choice through a mix of compatible developments and uses that work together to create viable places, thereby minimising the need to travel long distance and contributing to the reduction of transport energy usage and carbon dioxide emissions

Question 6.1

Does the development contain an appropriate type and mix of uses for its location?

Issues to consider:

- Are the uses compatible with each other and with the surrounding areas?
- Are innovative ways of mixing uses included within the design (i.e. live/work units, living above shop or separate workspace with curtilage, roof-top swimming pools, sauna in shed etc)
- In mixed use and commercial schemes does the development contribute to the economic sustainability of the existing and future communities?

6.1 The mix of uses can help to make places both vibrant and economically viable. In residential areas, a range of services and facilities can make the place more than just a dormitory and encourage people to utilize their immediate surrounding. Crucially, variety and a mix of uses can make places more attractive and visually stimulating for residents and visitors.

Question 6.2

Does the development provide (or is it close to) community facilities, such as a school, park, play areas, shops, pubs or cafes?

Issues to consider:

- Is the new development well located in terms of access to local facilities, public transport, footpath and cycle routes?
- Have opportunities for sport and physical activity been promoted through the design of the scheme?
- Have uses been co-located to offer the opportunity for linked trips?
- Is a mix of uses catered for - where it is appropriate - to minimise the need for people to travel by car and to promote active lifestyles and safe, vibrant places?

6.2 Creating a mix of uses can help to attract people to live, work and play in the same area. Mixed use areas and co-location of related activities, combined with appropriate densities and transportation opportunities, can encourage residents and users to use sustainable modes of transport including walking, cycle and public transport and reduce automobile trip distances and frequency. As such, diverse urban form can encourage more active lifestyles and the health and well-being associated with walking and cycling, and can contribute to modal shift and the reduction of energy usage and carbon dioxide emissions. In addition, providing a mix of uses, including living accommodation above shops, can contribute to enhanced social interaction, surveillance and security through activity, making areas feel safer and more welcoming.

6.3 New development can provide the opportunity to improve services and facilities serving the wider area, as part of a Section 106 agreement. Detailed analysis of the surrounding area of the development site is vital. This will identify the existing services and facilities, how successful they are, and therefore how sustainable and how well connected they are. In addition, consultation with the local community will help to ensure that proposals reflect their needs and will encourage them to take a stake in decisions about their neighbourhood.

Question 6.3

(In the residential element of schemes) Is there a tenure mix that reflects the needs of the local community?

Issues to consider:

- Does the development respond to the housing requirements of the local community?

Question 6.4

(In the residential element of schemes) Is there a mix of accommodation that reflects the needs and aspirations of the local community?

Issues to consider:

- Does the development respond to the housing requirements of the local community?

6.4 The North Northamptonshire Strategic Housing Market Assessment (SHMA) provides the basis for considering the mix of housing that will best meet identified housing needs and demands in particular localities and create a more balanced housing market that provides the types and sizes of housing that people want. Development proposals should seek to incorporate the requirements of the SHMA and individual district requirements.

Question 6.5

Is the density of the built form appropriate for its location?

Issues to consider:

- Has the overall density of the development been maximised whilst having regard for its location and the grain of the built environment in adjacent areas?
- Does the density of the development vary across the site?
- Does the scheme meet the minimum density requirement of Planning Policy Statement 3 (PPS3) or local density requirements, whichever is appropriate?

6.5 The most sustainable settlements will be walkable communities, based around mixed-use centres which are well connected by public transport. In this context, achieving the optimum densities in developments is a crucial component of creating sustainable development, as it enables more people to lead sustainable lifestyles. Furthermore, optimising densities has other sustainability benefits. For example, higher densities afford opportunities for energy efficient buildings i.e. compact settlements require larger buildings - larger buildings, especially offices and larger apartment blocks can develop better energy management programmes. Higher densities also offer more opportunities for energy solutions such as Combined Heat and Power (CHP). However, in establishing the appropriate density for a site regard must be given to its location and the local context

Further Information:

Relevant documents and further reading on Diversity is provided in Appendix VI and is available as a separate document.

7 Quality of the Public Realm

“A place with attractive, sustainable and successful outdoor areas”

To promote public spaces and routes that are attractive, safe, work effectively for all in society, and contribute to environmental sustainability including flood risk management and biodiversity and species movement.

Question 7.1

Is car parking well integrated so it supports the street scene?

Issues to consider:

- Is parking located on the street in front of buildings as part of a considered parking solution?
- Is parking located in private courtyards overlooked by dwellings, or otherwise secure?
- Does the parking scheme consider the need for emergency vehicle access?



Building for Life Gold Standard development - The Village, Chateram-on-the-Hill
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7.1 Parking is one of the most difficult challenges in designing developments. The level of parking provision and its location has a key influence on the form and quality of a development, and the choices people make about how they travel. While the greatest demand is for parking cars, there is also a need to consider the parking of cycles, motorcycles and service vehicles. On-street parking can bring activity to the street and have a calming effect; however an area should not be dominated by cars. A failure to properly consider this issue is likely to lead to inappropriate parking behaviour, resulting in poor and unsafe conditions for pedestrians.

Question 7.2

Is public space well designed and does it have suitable management arrangements in place?

Issues to consider:

- Does the design create attractive, convivial routes which are secure and overlooked?
- Does all space have a use and clearly defined ownership?
- Are children's play areas and seating areas located where they can be observed from nearby dwellings?
- Does the design meet open space standards in terms of provision of informal/formal recreation and play space?

7.2 The space around buildings is as important as the buildings themselves. For places to be successful they should have well-designed public spaces that people want to use and respect. Too often public space is the area left once buildings have been planned. Examples such as well-designed lighting, street furniture, planting and the use of public art can improve the quality of public space.

7.3 Schemes should ensure that public open spaces are available and attractive to the whole spectrum of the population. In particular what will be done to encourage people of all social classes, the elderly, ethnic minorities and people with disables to use the sites thereby benefiting from the known increased health and wellbeing associated with open spaces.

Question 7.3

Does the public realm contribute to the environmental sustainability of the scheme?

Issues to consider:

- Have open spaces informed/or been informed by the flood risk management strategy of the scheme?
- Have green infrastructure and biodiversity been taken into account in the design of the public realm?

7.4 A successful place has a system of open and green spaces and landscaping that respect natural features, contribute to environmental sustainability and are accessible. This may make use of natural assets such as water, riversides, slopes, trees and other planting that helps to create attractive spaces, facilitate flood risk management and encourage biodiversity. Deciduous trees and climbers can filter heat and pollution in summer and allow low winter sunlight, contributing to energy efficiency and reducing carbon emissions.

Further Information:

Relevant documents and further reading on Quality of the Public Realm is provided in Appendix VI and is available as a separate document.



Green space can contribute to quality of life, and flood risk and species managment.

Appendix I Glossary

A glossary of frequently used planning terms is available on the JPU website - www.nnjpu.org.uk/docs/Preferred%20Options%20Glossary.pdf

The following terms appear in this Supplementary Planning Document:

Term	Abbreviation	Definition
1-APP		The Standard Planning Application Form (1APP) was introduced by Communities and Local Government to replace all existing types of planning application forms (except minerals) within England. 1APP removes the differences in application forms by ensuring the same information is requested for comparable applications by every LPA in England.
Building Research Establishment	BRE	BRE provide a **complete range of consultancy, testing and commissioned research services** covering all aspects of the built environment, and associated industries.
Brownfield		Brownfield land or 'Previously Developed Land' is land that is, or was, occupied by a permanent structure (excluding agricultural or forestry buildings) and associated fixed-surface infrastructure. The definition covers the area surrounding the main building and used in connection with it. Planning Policy Guidance Note 3 Annex C (Housing) has a detailed definition.
Code for Sustainable Homes	CSH	The Code for Sustainable Homes (the Code) was introduced to improve the overall sustainability of new homes by setting a single national standard within which the home building industry can design and construct homes to higher environmental standards and offers a tool for developers to differentiate themselves within the market. The Code measures the sustainability of a new home against categories of sustainable design, rating the 'whole home' as a complete package.
Commission for Architecture and the Built Environment	CABE	CABE is the government's advisor on architecture, urban design and public space.
Delivered Energy		Quantity of energy in kWh that is measured at the incoming electricity or gas meter (or equivalent for other fuels). Calculation must include all fuels used for space heating, hot water, lights, cooking and other appliances.
Design and Access Statement	D&A Statement	Design and Access StatementsA statement that accompanies a planning application to explain the design principles and concepts that have informed the development and how access issues have been dealt with. The access element of the statement should demonstrate how the principles of inclusive design, including the specific needs of disabled people, have been integrated into the proposed development and how inclusion will be maintained and managed.

Development Plan Documents	DPD	This is a Local Development Document that has been subject to an independent public examination and is therefore a statutory planning document.
Green Infrastructure		A term used to describe and plan for a network of multi-functional green space, which includes recreational and sports facilities, parks, pathways and routes, natural and historic sites and water spaces, as well as accessible countryside. These green spaces can serve many uses including landscape enhancement, linkages, nature conservation, water management, food production, recreation, leisure and tourism and provision for healthy lifestyles.
Greenfield		Greenfield land (or a defined site) usually farmland, that has not previously been developed.
Joint Planning Committee	JPC	A Joint Planning Committee was established in July 2005 as the formal decision making body for the JPU. The Joint Planning Committee is the first such committee established under new planning legislation and is made up of 3 elected members from each planning authority.
Joint Planning Unit	JPU	The Planning Unit established by Corby, Kettering, Wellingborough and East Northamptonshire Councils, together with Northamptonshire County Council. The Joint Planning Unit comprises of planning officers drawn from the above authorities and is co-ordinating the preparation of a Local Development Framework for North Northamptonshire.
Lifetime Homes Standard	LHS	Design criteria which ensure that homes are designed flexibly enough to meet the needs of most households with the minimum of adaptation - are increasingly being adopted in the building of new homes.
Local Development Document	LDD	This is the generic name for a document that forms part of the Local Development Framework. It can either be a Development Plan Document or a Supplementary Planning Document.
Local Development Framework	LDF	This is a series of documents and maps that together sets out planning policy for the area it covers. The documents and maps will include a Core Strategy and proposals maps, along with other Development Plan Documents and also Supplementary Planning Documents. The North Northamptonshire Local Development Framework will cover the whole of the local authority areas of Corby, East Northamptonshire, Kettering and Wellingborough.
Local Development Scheme	LDS	This sets out the programme for the preparation of the Local Development Documents that together will comprise the Local Development Scheme. The Local Development Scheme has to be submitted and approved by the Secretary of State.
Milton Keynes South Midlands Sub-Regional Strategy		One of four growth areas in the wider South East promoted by the Government through its Sustainable Communities Plan (2003) which seeks to increase housing supply; address issues concerning skills and the labour market; tackle deprivation and tackle transport and other infrastructure issues. The Milton Keynes and South Midlands Sub-Regional Strategy now forms the Northamptonshire element of the Regional Spatial Strategy for the East Midlands.

North Northamptonshire Core Spatial Strategy	The Plan	The part of the Local Development Framework that sets out the strategy for the area, together with the policies and key proposals to implement the strategy.
North Northamptonshire Development Company	NNDC	North Northants Development Company (NNDC) seeks to drive, co-ordinate and manage the delivery of sustainable growth across North Northamptonshire through the procurement of infrastructure and the regeneration of communities.
Planning Policy Statement	PPS	Issued by central Government to replace the existing Planning Policy Guidance notes in order to provide greater clarity and to remove from national policy advice on practical implementation, which is better expressed as guidance rather than policy.
Regional Spatial Strategy for the East Midlands (RSS 8)	Regional Strategy	This document sets out proposals for the sustainable development of the Region's economy, infrastructure, housing and other land uses. The Milton Keynes and South Midlands Sub-Regional Strategy now forms the Northamptonshire element of the Regional Spatial Strategy for the East Midlands.
Supplementary Planning Documents	SPD	These are documents that give policy guidance to supplement policies and proposals in Development Plan Documents. They are not subject to an independent public examination and therefore non-statutory planning documents having less weight in guiding decisions on planning applications than Development Plan Documents.
Sustainable Development/Sustainability		Sustainable development is: *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission Report, 1987.)*
Sustainable Design and Energy Statements	SDES	Sustainable Design and Energy Statement are required as part of the new **1-APP** system operated by local planning authorities in North Northamptonshire for standardising planning application submissions. The checklist in this SPD provides a framework for the completion of the statement to accompany planning applications
Urban Design		The art of making places. It involves the design of buildings, groups of buildings, spaces and landscapes, in villages, towns and cities, to create successful development.

Appendix II Policy and Legislative Context

Information Source	Subject	Reference/Link
International/European		
World Commission on Environment and Development – Bruntland Report, 1987	Sustainable Development	Bruntland, G (ed) (1987). Our Common Future: The World Commission on Environment and Development, Oxford: OxfordUniversity Press.
UN Framework Convention on Climate Change (1992)	Climate Change	**http://unfccc.int/resource/docs/_convkp/conveng.pdf**
Kyoto Protocol (1997)	Climate Change	**http://unfccc.int/resource/docs/_convkp/kpeng.pdf**
European Union *Directive 2002/91/EC – Energy Performance in Buildings*	Energy	**http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0091:EN:NOT**
National		
A Better Quality of Life: A Strategy for Sustainable Development in the United Kingdom' (1999)	Sustainable Development	**http://www.sustainable-development.gov.uk/publications/uk-strategy99/index.htm**
Securing the Future: Delivering the UK Sustainable Development Strategy' (2005)	Sustainable Development	**http://www.sustainable-development.gov.uk/publications/uk-strategy/index.htm**
Government White Paper (2003), *'Our Energy Future – Creating a Low Carbon Economy*	Energy	**http://www.berr.gov.uk/files/file10719.pdf**

The UK Fuel Poverty Strategy, (2001) DTI	Energy	http://www.dti.gov.uk/energy/fuel-poverty/_strategy/index.html
Government's Strategy) for combined Heat and Power to 2010 (2004)	Energy	http://www.defra.gov.uk/environment/climatechange/uk/energy/chp/pdf/chp-strategy.pdf
PPS 22 Renewable Energy (2006)	Energy	http://www.communities.gov.uk/documents/planningandbuilding/pdf/147444
Draft PPS 'Planning and Climate Change (2006)	Climate Change	http://www.communities.gov.uk/documents/planningandbuilding/pdf/153119
Building a Greener Future (2006)	Sustainability	http://www.communities.gov.uk/documents/planningandbuilding/pdf/building-greener
Climate Change Bill (2006)	Sustainability	http://www.official-documents.gov.uk/document/cm70/7040/7040.pdf
Code for Sustainable Homes (2006)	Sustainability	http://www.communities.gov.uk/publications/planningandbuilding/codeguide
By Design (CABE 2000)	Urban Design	http://www.cabe.org.uk/AssetLibrary/_1818.pdf
Building for Life (CABE 2005)	Urban Design	http://www.cabe.org.uk/buildingforlife.aspx?home=true&refid =
Building Regulations (2006)	Sustainability	http://www.planningportal.gov.uk/england/professionals/en/4000000000001.html
Regional/Local		
Regional Spatial Strategy 8 (EMRA 2005)	Spatial Planning	http://www.goem.gov.uk/goem/psc/suscom/rss/

North Northamptonshire Core Spatial Strategy (NNJPU 2006)	Spatial Planning	http://www.nnjpu.org.uk/documents/docdetail.asp?docid=187
Landscape Character Assessment (RNRP 2006)	Landscape Character	http://www.rnrpenvironmentalcharacter.org.uk/

Appendix III Achieving Code Level 3 - An Example

A home meeting any level of the Code will have to meet minimum standards for certain items depending on what level is desired. For Level 3 this means:

The home will have to be 25% more energy efficient than one built to the 2006 Building Regulations standards. This could be achieved by:

- Improving the thermal efficiency of the walls, windows, and roof as far as is practically possible (by using more insulation or better glass for example);
- Reducing air permeability to the minimum consistent with health requirements (a certain amount of air ventilation is needed in a home for health reasons);
- Installing a high efficiency condensing boiler;
- Carefully designing the fabric of the home to reduce thermal bridging (thermal bridging allows heat to easily escape between the inner walls and the outer walls of a home);
- Possibly using district heating systems or low and zero carbon technologies such as solar thermal panels or biomass boilers to help heat the hot water.

The home will have to be designed to use no more than about 105 litres of water per person per day. This could be achieved by fitting a number of items such as:

- 6/4 Dual Flush WC;
- Flow Reducing/Aerating taps throughout;
- 6-9 litres per minute shower (note that an average electric shower is about 6/7 litres per minute);
- a smaller, shaped bath – still long enough to lie down in, but less water required to fill it to a level consistent with personal comfort;
- 18ltr maximum volume dishwasher;
- 60ltr maximum volume washing machine.

Other minimum requirements are required for:

- Surface water management – this may mean the provision of soakaways and areas of porous paving;
- Materials – this means a minimum number of materials meeting at least a ‘D’ grade in the Building Research Establishment’s Green Guide (the scale goes from A+ to E);
- Waste management – this means having a site waste management plan in place during the home’s construction, and adequate space for waste storage during its use.

But to get to Level 3 you need a further 46.7 points. So the builder/developer must do other things to obtain the other points such as:

- Providing drying space (so that tumble dryers need not be used);
- Providing more energy efficient lighting (both internally and externally);
- Providing cycle storage;
- Providing a room that can be easily set up as a home office;
- Reducing the amount of water than runs off the site into the storm drains;
- Using much more environmentally friendly materials;
- Providing recycling capacity either inside or outside the home;
- Enhancing the security of the home;
- Enhancing the sound insulation used in the home.

Appendix IV BREEAM Standards

BREEAM Bespoke can assess buildings that fall outside the standard BREEAM categories, including leisure complexes. laboratories, higher & further education buildings and hotels at the design stage and post construction.

BREEAM Industrial can assess storage & distribution, light industrial units, factories and workshops at the design stage and post construction.

BREEAM Multi-Residential can assess student halls of residence, sheltered housing for the elderly, supported housing and hostel type accommodation at the design stage and post construction.

BREEAM Prisons can assess high and standard security prisons, young offenders institutions, local prisons and women's prisons at the design stage and post construction.

BREEAM Offices can assess new build or major refurbishment and existing offices, at the design stage, post construction and in use.

BREEAM Retail can assess new build or major refurbishment, post construction, tenant fit-out, existing (occupied), management and operation.

BREEAM Schools can assess new schools, major refurbishment projects and extensions at the design stage and post construction.

BREEAM Healthcare can be used to assess all healthcare buildings containing medical facilities, and at different stages of their lifecycle, new builds, major refurbishments, extensions and existing buildings in operation.

The Code for Sustainable Homes is to be used to assess new residential build.

Appendix V Checklist

The final version of this checklist will be available as an "editable pdf" that can be electronically attached along with planning applications and Sustainable Design and Energy Statements through the 1-APP process.

The following checklist corresponds to the questions presented in Chapters 1 – 7 of the SPD.

The checklist provides a framework for applicants in completing Sustainable Design and Energy Statements to accompany planning applications - see figure A1 below for an example.

This will help applicants demonstrate that the most appropriate sustainable design solutions are selected, and provide the local planning authority with a systematic method of assessing whether the proposal meets the relevant planning policies and other requirements.

Users should refer the table on page 11 of the SPD, and to 1-APP for the definitive list of applications where a Sustainable Design and Energy Statement is required.

Figure A1 Checklist example

REF	SPD Question	Response	Reference	Internal Use Only
Q 7.2	**Is car parking well integrated so it supports the street scene? (BfL 8)**	√	See Sustainable Desing and Energy Statement para 3.5	

Building for Life questions can be identified in the checklist by the initials ***BfL*****,** plus the relevant number. This reference has been provided to enable schemes to be put forward for accreditation under the BfL standard if desired.

Each section includes questions relevant to both residential development and non-residential development. The questions can then be selected that are relevant to the development in hand.

1. Character

REF	SPD Question	Response	Reference	Internal Use Only
Q 1.1	Does the scheme feel like a place with a distinctive character? (BfL 8)			
Q 1.2	Do buildings exhibit architectural quality? (BfL 17)			
Q 1.3	Does the scheme exploit existing buildings, landscape or topography? (BfL 7)			
Q 1.4	Is the design specific to the scheme? (BfL 6)			

2. Continuity and Enclosure

REF	SPD Question	Response	Reference	Internal Use Only
Q 2.1	Are streets defined by a coherent and well structured layout? (BfL 10)			
Q 2.2	Are public spaces and pedestrian routes overlooked and do they feel safe? (BfL 15)			
Q 2.3	Are private space well designed with respect to their intended user?			

3. Ease of Movement

REF	SPD Question	Response	Reference	Internal Use Only
Q 3.1	Does the scheme integrate with existing roads, paths and surrounding development? (BfL 14)			
Q 3.2	Does the building layout take priority over the roads and car parking, so that highways do not dominate? (BfL 11)			
Q 3.3	Are the streets pedestrian, cycle and vehicle friendly? (BfL 13)			
Q 3.4	Does the development have easy access to public transport? (BfL 4)			
Q 3.5	Are transportation routes resilient to changing environmental conditions?			

4. Legibility

REF	SPD Question	Response	Reference	Internal Use Only
Q 4.1	Do buildings and layout make it easy to find your way around? (BfL 9)			

5. Adaptability, Resilience and Environmental Sustainability

Q 5.1 – Q5.10 are posed to assess the qualities of all schemes in terms of adaptability, resilience and environmental sustainability considerations. Answering these questions in required for the purposes of this SPD and the achievement of sustainable design in North Northamptonshire. However, for residential schemes, answering Q5.3 – Q5.10 below will assist schemes seeking a positive score the following BFL questions:

BfL 20 - Do buildings or spaces outperform statutory minima, such as Building Regulations?

In assessing schemes against the BfL criteria, CABE do not give accreditation for the above questions to schemes that provide a token gesture e.g. the provision of recycling facilities or a water butt. The achievement of a positive score for these questions is considered holistically and in the context of the overall sustainability credentials of particular schemes. As such, answering the following question for the purposes of this SPD will also help schemes make a robust case for the achievement of a positive score for **BfL question 20**.

REF	SPD Question	Response	Reference	Internal Use Only
Q 5.1	Do internal spaces and a layout allow for adaptation, conversion or extension? (BfL 18)			
Q5.2	Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness? (BfL 19)			
Q 5.3	Does the scheme incorporate energy efficient design?			
Q 5.4	Does the scheme have appropriate water conservation measures?			
Q 5.5	Does the scheme have appropriate flood-risk management strategies?			
Q 5.6	Does the scheme promote waste management and recycling?			

Q 5.7	Does the scheme incorporate green infrastructure and ecological considerations?			
Q 5.8	Does the scheme make use of recycled land and/or material?			
Q 5.9	Are buildings orientated and designed to maximise levels of solar gain, daylight and natural ventilation?			
Q 5.10	Does the development work with the natural features of the site?			

6. Diversity

REF	SPD Question	Response	Reference	Internal Use Only
Q 6.1	Does the development contain an appropriate type and mix of uses for its location?			
Q 6.2	Does the development provide (or is it close to) community facilities, such as a school, park, play areas, shops, pubs or cafes? (BfL 1)			
Q 6.3	(In residential schemes) Is there a tenure mix that reflects the needs of the local community? (BfL 3)			
Q 6.4	(In residential schemes) Is there a mix of accommodation that reflects the needs and aspirations of the local community? (BfL 2)			
Q 6.5	Is the density of the built form appropriate for its locations?			

7. Quality of the Public Realm

REF	SPD Question	Response	Reference	Internal Use Only
Q 7.1	Is car parking well integrated so it supports the street scene? (BfL 12)			
Q 7.2	Is public space well designed and does it have suitable management arrangements in place? (BfL 16)			
Q 7.3	Does the public realm contribute to the environmental sustainability of the scheme?			

Appendix VI Further Reading

This section is available separately and will be updated by the individual local planning authorities.