Chapter 4
Climate Change

Cambourne, South Cambridgeshire

Chapter 4 Climate Change

4.1 Our day-to-day activities and lifestyles such as heating and powering our homes and using our cars are releasing significant quantities of greenhouse gases into the atmosphere, affecting the climate in ways that could threaten how we live both today and tomorrow. Greenhouse gas emissions are the collective name for a range of gases that trap some of the sun's warmth within the earth's atmosphere, and the most prevalent greenhouse gas is carbon dioxide. The effects of climate change include shifts in our seasons, hotter drier summers, warmer wetter winters, rising sea levels and more extreme weather events such as droughts, flash floods, and strong winds. National policy is leading the response to climate change but there are measures that can be taken through the Local Plan to reduce our contributions to greenhouse gas emissions and adapt development to deal with the consequences of climate change.

4.2 Both reducing the impacts of, and being less vulnerable to, climate change is an essential part of delivering the environmental element of sustainable development. The National Planning Policy Framework (NPPF, 2012) states that planning can help to create places that secure radical reductions in greenhouse gas emissions, minimise vulnerability and provide resilience to the impacts of climate change, and deliver renewable and low carbon energy systems.

4.3 The UK has committed to targets for reducing greenhouse gas emissions, and increasing energy generation from renewable sources, these are:

- an 80% reduction in greenhouse gas emissions by 2050 (from 1990 levels);
- a 26% reduction in carbon dioxide emissions by 2020 (from 1990 levels); and
- sourcing 15% of its energy from renewable sources by 2020 (in 2010 3.3% of UK energy came from renewable sources).

Although meeting these targets will go some way to slowing down climate change, it is not going to immediately stop the changes happening, therefore developments will still need to be designed to be resilient to the predicted impacts.

4.4 A range of measures will contribute to reducing greenhouse gas emissions and protecting our residents and business from the consequences of climate change:

- buildings that will minimise heat loss in colder weather and also minimise overheating in hotter weather;
- locating new developments where they will minimise the need for travel by car and more sustainable alternatives are available;
- including energy and water efficiency in the design and construction of buildings;
- integrating renewable and low carbon energy technologies within a building(s) or delivering community renewable energy projects;
- incorporating green spaces and vegetation within developments to increase the absorption of carbon dioxide emissions and surface water run-off; and
- ensuring that buildings are designed to protect their occupiers from extreme weather events.

4.5 This chapter sets out the planning policies that will ensure that development delivered in South Cambridgeshire can better cope with the predicted impacts of climate change as well as helping to ensure that it reduces greenhouse gas emissions. New development and refurbishment of existing buildings in the district provides an opportunity to deliver sustainable schemes and these opportunities will need to be integrated within the district's unique built and natural heritage.

Key Facts:

- In March 2012 there were planning permissions for approximately 40MW of renewable energy from 15 wind turbines, two solar energy farms, two biomass boilers, and 22 arrays of photovoltaic panels.
- Planning permission for the first community wind turbine in the district, near Gamlingay, was approved in April 2012 and installed in 2013.
- Gas and electricity consumption in the district has fallen in the last few years however fuel poverty is affecting 13.5% of households.
- The Sustainable Parish Energy Partnership consists of 27 Parish Councils working with volunteers to help residents cut fuel bills and reduce carbon emissions.
- Environmentally friendly show homes for new developments have been opened at Cambourne (February 2013) and Trumpington Meadows (August 2012).
- The district is designated an area of Water Stress with areas subject to flood risk.

Mitigation and Adaptation to Climate Change

Policy CC/1: Mitigation and Adaptation to Climate Change

Planning permission will only be granted for proposals that demonstrate and embed the principles of climate change mitigation and adaptation into the development. Applicants must submit a Sustainability Statement to demonstrate how these principles have been embedded into the development proposal. The level of information provided in the Sustainability Statement should be proportionate to the scale and nature of the proposed development.

4.6 The National Planning Policy Framework (NPPF, 2012) requires that local planning authorities adopt proactive strategies to mitigate and adapt to climate change.

4.7 Climate change mitigation means taking action to reduce the causes of climate change, primarily through reductions in greenhouse gas emissions. Designing and constructing developments that are extremely energy efficient or make the best use of renewable energy technologies are both ways of helping to mitigate further climate change.

4.8 Climate change adaptation means ways that a development can be adapted to deal with the weather related consequences of climate change. Using water more efficiently, reducing overheating and controlling high levels of rainwater run-off are all examples of adapting a development to respond to changes in our climate.

4.9 The principles of climate change adaptation and mitigation are embedded within the policies included in this chapter and other chapters in this plan, and therefore references are provided in the paragraphs below to the detailed policies. Further guidance on what should be included in a Sustainability Statement will be provided in the review of the District Design Guide SPD.

4.10 To mitigate climate change, proposals should demonstrate:

- high levels of energy efficiency (Building Regulations);
- use and generation of renewable and low carbon energy (Policy CC/3);
- promotion of sustainable forms of transport, such as using buses, cycling or walking, and reduction of car use (Policy HQ/1 & Transport Policies);
- recycling and waste reduction both during construction and occupation (Policy CC/6); and
- inclusion of high speed broadband to facilitate home working (Policy TI/10).

4.11 To adapt to the effects of climate change, proposals should:

- manage and conserve water resources (Policy CC/4);
- demonstrate that flood risk from all sources has been avoided or managed (Policy CC/9);
- use Sustainable Drainage Systems (SuDS) (Policy CC/8);
- use layout, building orientation, design, and materials to ensure properties are not susceptible to overheating and include open space and vegetation for shading and cooling, and to detain surface water run-off (Policy HQ/1); and
- create a better linked habitat network by conserving, creating or enlarging existing habitats (Policy NH/4).

4.12 The policy requires applicants to submit a Sustainability Statement to demonstrate how the principles of climate change mitigation and adaptation have been embedded within the development proposal. The Council would recommend that in the case of larger-scale developments (100 or more dwellings or exceeding 5,000m^2 of other floorspace) that a BREEAM Communities assessment is undertaken as part of demonstrating how they have integrated sustainable design into the masterplanning process.

4.13 To help local authorities, businesses and other organisations to consider the impacts of climate change and appropriate adaptation, the Environment Agency has published 'Climate Ready' – a set of tools and information to help live with the changing climate, guidance on adaptation, and maps showing detailed climate change information for each river basin district (using data from the UK Climate Change Projections 2009).

Renewable and Low Carbon Energy Generation

Policy CC/2: Renewable and Low Carbon Energy Generation

1. Planning permission for proposals to generate energy from renewable and low carbon sources, with the exception of proposals for wind turbines, will be permitted provided that:
   a. The development, and any associated infrastructure, either individually or cumulatively with other developments, does not have unacceptable adverse impacts on heritage assets (including their settings), natural assets, high quality agricultural land, the landscape, or the amenity of nearby residents (visual impact, noise, shadow flicker, odour, fumes, traffic);
   b. The development can be connected efficiently to existing national energy infrastructure, or by direct connection to an associated development or community project, or the energy generated would be used for onsite needs only;
   c. Provision is made for decommissioning once the operation has ceased, including the removal of the facilities and the restoration of the site; and
   d. Developers have engaged effectively with the local community and local authority.

2. Planning permission for wind energy development involving one or more wind turbines will only be permitted provided that:
   e. The development site is in an area identified as suitable for wind energy development in a Neighbourhood Plan; and
   f. Following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.

4.14 This policy sets out the criteria that must be considered when assessing proposals for developments to generate renewable or low carbon energy from freestanding installations, such as wind or solar farms.

4.15 Renewable and low carbon energy generation sources can either fully or partially displace the use of fossil fuels. These sources include technologies such as photovoltaic panels, wind turbines, solar thermal panels, air or ground source heat pumps, anaerobic digestion, combined heat and power plants, and biomass boilers where heat is generated. These technologies need to be located onsite or close to the energy users.

4.16 Using renewable and low carbon energy technologies to generate electricity and/or heat will help to reduce greenhouse gas emissions and should also progressively

improve the security, availability and affordability of energy by increasing the diversity of sources we can access.

Renewable and Low Carbon Energy in New Developments

Policy CC/3: Renewable and Low Carbon Energy in New Developments

1. Proposals for new dwellings and new non-residential buildings of 1,000m^2 or more will be required to reduce carbon emissions by a minimum of 10% (to be calculated by reference to a baseline for the anticipated carbon emissions for the property as defined by Building Regulations) through the use of on-site renewable energy and low carbon technologies.

2. This could be provided through the installation of an integrated system or site wide solutions involving the installation of a system that is not integrated within the new building. For a site wide solution, evidence must be submitted demonstrating that the installation is technically feasible and is capable of being installed.

3. For growth areas and new settlements, site wide renewable and low carbon energy solutions that maximise on-site generation from these sources will be sought, such as renewable and low carbon district heating systems.

4.17 New developments, such as housing, employment and community uses, can generate their own renewable energy by integrating smaller technologies such as solar panels into their design. This will also contribute to the achievement of national renewable energy targets. To meet the requirements of the policy, an applicant should design the development to achieve compliance with Part L of Building Regulations, and then use this as the baseline for calculating the amount of carbon emissions that should be met through the provision of renewable or low carbon energy technologies in accordance with the policy. The choice of which renewable or low carbon energy technology to use to deliver compliance with the policy rests with the applicant and should respond to the specific characteristics of the development proposed. Detailed guidance on the implementation of Policy CC/3 and the supporting documents that should be submitted to demonstrate compliance with the policy will be provided in a Supplementary Planning Document.

4.18 The Council, in partnership with three other local authorities in Cambridgeshire, commissioned a review of their existing policies that require reduction in carbon emissions from new developments through the installation of on-site renewable energy generation technologies. The Review of Merton Rule policies in four local planning authorities in Cambridgeshire considered the effectiveness of these

policies and highlighted assessment, enforcement and monitoring concerns and inconsistency in delivery of the policy. The study found that either solar thermal or photovoltaic panels or a combination of both were the most tried and tested technologies that are also low maintenance and customer friendly.

Water Efficiency

Policy CC/4: Water Efficiency

1. All new residential developments must achieve as a minimum water efficiency equivalent to 110 litres per person per day.

2. Proposals for non-residential development must be accompanied by a water conservation strategy, which demonstrates a minimum water efficiency standard equivalent to the BREEAM standard for 2 credits for water use levels unless demonstrated not practicable.

4.19 The NPPF (2012) states that planning should support the transition to a low carbon future in a changing climate, and to achieve this should seek ways to radically reduce greenhouse gas emissions, actively support energy efficiency improvements and use nationally described standards when setting any local requirements for a building's sustainability.

4.20 The Government has created a new approach for the setting of technical standards for new housing, including relating to water efficiency. The web based planning practice guidance (PPG) states that local planning authorities have the option to set additional technical requirements exceeding the minimum standards required by Building Regulations in respect of water efficiency where there is a clear local need.

4.21 The Cambridge Water Company is in an area of water stress as designated by the Environment Agency. The average person in the UK uses 150 litres of water per day. Water is a finite resource, and abstraction can have environmental costs. Cambridge Water Company's Resources Management Plan shows that beyond 2035, without additional resources or greater efficiency, the need for water to serve development will be greater than currently available supply. Cambridge Water Company are carrying out an enhanced programme of installing water meters to encourage reduced water use and are raising awareness of the need to save water.

4.22 Reflecting these local circumstances the policy requires higher water efficiency standards than the national Building Regulations. The efficiency measures required can be delivered at relatively low additional cost.

Sustainable Show Homes

Policy CC/5: Sustainable Show Homes

1. On developments where a show home is being provided, a sustainable show home must be provided (either separately or instead of the show home) demonstrating environmentally sustainable alternatives beyond those provided to achieve the standard agreed for the development.

2. The sustainable alternatives can be purchased when a dwelling is bought off-plan and must be fully functional in the show home and positively marketed. Purchasers should be clear on where alternatives are available, why it is more sustainable, and the cost of including the alternative.

3. It must be as practical as possible for the purchaser to buy the sustainable alternatives as to purchase the standard options and the environmentally friendly options must be offered at a price (including cost of delivery and/or installation) that reflects the same profit margin to the developer as other standard buyer's options or extras.

4.23 Sustainable show homes can demonstrate environmentally sustainable alternatives for finishes, materials, fixtures and technologies as options that can be purchased when a dwelling is bought off-plan. Examples of options include:

- renewable technologies such as solar panels;
- rainwater harvesting and greywater recycling devices;
- windows and doors from sustainably sourced materials, with significantly improved 'u' values;
- mechanical ventilation and heat recovery;
- smart energy metering and management systems;
- low energy internal and external light fittings;
- water efficient toilets and other sanitary ware fixtures or fittings;
- white goods with high energy efficiency ratings and low water consumption;
- raised growing beds, composting and enhanced recycling bins;
- sustainably sourced and low embodied energy flooring and wall finishes, kitchens and furniture.

4.24 The Council has secured the provision of sustainable show homes at Trumpington Meadows and Cambourne.

Construction Methods

Policy CC/6: Construction Methods

1. Development which by its nature or extent is likely to have some adverse impact on the local environment and amenity during construction and/or generate construction waste must:
   a. Carefully manage materials already on-site (including soils), or brought to the site, to reduce the amount of waste produced and maximise the reuse or recycling of materials either onsite or locally. Any construction spoil reused within the development should take account of the landscape character and avoid the creation of features alien to the topography;
   b. Ensure that constructors are considerate to neighbouring occupiers by restricting the hours of noisy operations and by locating storage compounds and using plant or machinery to avoid noise, smells, dust, visual or other adverse impacts.

2. Where practicable, construction traffic will be required to be routed to avoid roads passing through villages.

3. Any temporary haul roads must:
   c. Be agreed with the Local Planning Authority;
   d. Be located, designed and landscaped in such a way as to avoid any adverse impacts on existing residents and businesses;
   e. Have an agreed methodology for where they cross public rights of way; and
   f. Include provision for the cleaning of vehicle tyres to avoid the deposition of mud / debris on the public highway and the generation of dust.

4. Applicants must submit supporting documents with any planning application to demonstrate how their development will comply with this policy; this should include a Construction Environmental Management Plan (CEMP) or similar document and may include registration with the Considerate Constructors Scheme. The level of information provided in the supporting documents, including CEMP or similar document, should be proportionate to the scale and nature of the proposed development.

4.25 The construction process for any new development utilises a significant amount of natural resources and generates construction waste and spoil. Construction of new developments can adversely affect the amenity of surrounding occupiers and the local environment through the generation of noise, smells and dust.

4.26 A Construction Environmental Management Plan or similar document should set out the management measures which the builders will adopt and implement for the construction of the proposed development to avoid and manage any construction effects on: the environment and surrounding communities.

4.27 The Considerate Constructors Scheme is a national initiative set up by the construction industry. Any construction sites and companies that register with the scheme are monitored against a Code of Considerate Practice, which includes guidelines for respecting the community by considering the impact on their neighbours, and for protecting and enhancing the environment.

Water Quality

Policy CC/7: Water Quality

1. In order to protect and enhance water quality, all development proposals must demonstrate that:
   a. There are adequate water supply, sewerage and land drainage systems (including water sources, water and waste water infrastructure) to serve the whole development, or an agreement with the relevant service provider to ensure the provision of the necessary infrastructure prior to the occupation of the development. Where development is being phased, each phase must demonstrate sufficient water supply and waste water conveyance, treatment and discharge capacity;
   b. The quality of ground, surface or water bodies will not be harmed, and opportunities have been explored and taken for improvements to water quality, including renaturalisation of river morphology, and ecology;
   c. Appropriate consideration is given to sources of pollution, and appropriate Sustainable Drainage Systems (SuDS) measures incorporated to protect water quality from polluted surface water runoff.

2. Foul drainage to a public sewer should be provided wherever possible, but where it is demonstrated that it is not feasible, alternative facilities must not pose unacceptable risk to water quality or quantity.

4.28 The quality of water bodies is measured in terms of their overall 'ecological status' which is made up of their chemical, biological and physical attributes. The Local Plan needs to ensure that development does not result in a deterioration of water quality, and that opportunities are taken for enhancement to support the achievement of the Water Framework Directive standards.

4.29 In South Cambridgeshire the majority of rivers are currently of moderate or poor ecological status. Most failures are due to phosphates and man-made alterations to river and bank form. In much of the south east of the district the underlying geology is chalk, providing a significant source of groundwater which is used for the public drinking water supply. It is particularly important that the quality of this water is protected from pollution in these areas. Groundwater Protection maps are prepared by the Environment Agency, identifying zones of greatest risk.

4.30 Anglian Water and the Cambridge Water Company are the statutory undertakers responsible for water supply, sewerage and sewage disposal. The Environment Agency is responsible for water resource management, fluvial flooding, river management, pollution control and regulating the handling and disposal of waste water. Internal Drainage Boards (IDBs) manage all drainage within their areas excluding main rivers. Those applying for planning permission should consult statutory undertakers and IDBs as they may levy an infrastructure charge. Maps showing the area covered by individual Internal Drainage Boards can be found in the Council's Strategic Flood Risk Assessment, and in the Cambridgeshire Flood and Water Supplementary Planning Document.

4.31 South Cambridgeshire is a rural district, and not all developments will have access to a public sewer. It is essential that development provides appropriate plant that will treat effluent safely and protect the environment. A package treatment plant will be sought where practicable, and only where it is not practicable will a system incorporating septic tanks be acceptable.

Sustainable Drainage Systems

Policy CC/8: Sustainable Drainage Systems

Development proposals must incorporate appropriate sustainable surface water drainage systems (SuDS) appropriate to the nature of the site. Development proposals will be required to demonstrate that:

a. Surface water drainage schemes comply with the Sustainable Drainage Systems: Non-statutory technical standards for sustainable drainage systems and the Cambridgeshire Flood and Water Supplementary Planning Document or successor documents;
b. Opportunities have been taken to integrate sustainable drainage with the development, create amenity, enhance biodiversity, and contribute to a network of green (and blue) open space;
c. Surface water is managed close to its source and on the surface where it practicable to do so;
d. Maximum use has been made of low land take drainage measures, such as rain water recycling, green roofs, permeable surfaces and water butts;

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e. Appropriate pollution control measures have been incorporated, including multiple component treatment trains; and
f. Arrangements have been established for the whole life management and maintenance of surface water drainage systems.

4.32 Well planned and well designed surface water management infrastructure is necessary for the creation and ongoing maintenance of sustainable communities. It provides a flood risk management function alongside benefits for amenity and biodiversity and can be linked to a network of green (and blue) open spaces. It can also conserve water resources and help improve the quality of water as it passes through the system. All these aspects make a significant contribution to climate change adaptation.

4.33 The Government is committed to protecting people and property from flood risk and expects that SuDS will be provided in new developments wherever this is appropriate. However, there is still a risk that SuDS are seen as later additions to development, and do not fully realise their potential multifunctional benefits. They should be considered from the beginning of the design and masterplanning process, taking account of all opportunities and constraints, including heritage and wildlife assets.

4.34 In some areas of the district infiltration SuDS will not be practicable due to ground conditions, but there are a wide range of measures that can be implemented to find suitable solutions for all sites. Detailed guidance on developing proposals that include the use of SuDS that effectively manage water, are aesthetically pleasing, conserve, accommodate and enhance biodiversity, and provide amenity for local residents is provided in the Cambridgeshire Flood and Water Supplementary Planning Document.

Managing Flood Risk

Policy CC/9: Managing Flood Risk

1. In order to minimise flood risk, development will only be permitted where:
   a. The sequential test and exception tests established by the National Planning Policy Framework demonstrate the development is acceptable (where required).
   b. Floor levels are 300mm above the 1 in 100 year flood level plus an allowance for climate change where appropriate and where appropriate and practicable also 300mm above adjacent highway levels.

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c. Suitable flood protection / mitigation measures are incorporated as appropriate to the level and nature of flood risk, which can be satisfactorily implemented to ensure safe occupation, access and egress. Management and maintenance plans will be required, including arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime;
d. There would be no increase to flood risk elsewhere, and opportunities to reduce flood risk elsewhere have been explored and taken (where appropriate), including limiting discharge of surface water (post development volume and peak rate) to natural greenfield rates or lower, and
e. The destination of the discharge obeys the following priority order:
    i. Firstly, to the ground via infiltration;
    ii. Then, to a water body;
    iii. Then, to a surface water sewer;
    iv. Discharge to a foul water or combined sewer is unacceptable.

2. Site specific Flood Risk Assessments (FRAs) appropriate to the scale and nature of the development and the risks involved, and which takes account of future climate change, will be required for the following:
    f. Development proposals over 1ha in size;
    g. Any other development proposals in flood zones 2 and 3;
    h. Any other development proposals in flood zone 1 where evidence, in particular the Strategic Flood Risk Assessment or Surface Water Management Plans, indicates there are records of historic flooding or other sources of flooding, and/or a need for more detailed analysis.

3. FRAs will need to meet national standards and local guidance (including recommendations of the South Cambridgeshire and Cambridge City Strategic Flood Risk Assessment (2010) and the Phase 1 and 2 Water Cycle Strategy or successor documents).

4.35 The NPPF (2012) requires a risk based sequential approach to flood risk, to avoid high risk areas and steer development to areas at lower risk. As well as minimising risk to the development itself, development should not increase flood risk elsewhere, and opportunities should be taken to reduce risk downstream, such as by reducing run off rates.

4.36 The Environment Agency publishes a Flood Map for Planning on their website, which identifies areas with an annual likelihood of flooding greater than 1% in any year for fluvial inland flooding (equivalent to 1 flood event in 100 years). They do not take account of existing flood defences, but show where these are present.

4.37 South Cambridgeshire District Council, in partnership with Cambridge City Council, commissioned a Strategic Flood Risk Assessment, which explores the nature and extent of flood risk across the area, taking account of the anticipated impacts of climate change. In addition, Cambridgeshire County Council, now the lead local flood management authority, has prepared a Surface Water Management Plan. These should be used to support the consideration of planning applications. A flooding and water management Supplementary Planning Document will be prepared in liaison with stakeholders to assist developers and key stakeholders with the effective delivery and implementation of the policy.

4.38 The appropriate responsible bodies including The Environment Agency, Anglian Water, Internal Drainage Boards and Cambridgeshire County Council should be consulted, as appropriate, during the initial design process for any new development or redevelopment.

Chapter 5
Delivering High Quality Places

Impington, South Cambridgeshire

Chapter 5 Delivering High Quality Places

5.1 The National Planning Policy Framework (NPPF, 2012) establishes that Planning should "always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings".

5.2 South Cambridgeshire has been voted amongst the top 10 places in the country to live in a number of national surveys over recent years. The Local Plan seeks to shape development of all scales, be that small scale rural housing to major new communities, to create sustainable and successful places that protect the special qualities of the district's rural character, whilst using the opportunities presented by development to enhance the built and natural environment, and create vibrant communities.

5.3 The District Council has signed up to the Cambridgeshire Quality Charter for Growth, which is a clear policy statement of the aspiration to create new developments that offer communities a fulfilling, visually pleasing and environmentally sensitive way of life.

Key Facts:

- The district has settlements of varied and distinct local character, ranging from compact hamlets through larger villages with linear street patterns to new settlements and extensions to the urban fabric of Cambridge.
- The Council has signed up to the Cambridgeshire Quality Charter for Growth, published in 2010, which sets out core principles for the level of quality expected in new developments.
- South Cambridgeshire has adopted a District Design Guide (2010) to provide additional guidance on how developments can ensure they are sustainable and achieve a high quality of design in a way that respects the local context.

Securing High Quality Design

Policy HQ/1: Design Principles

1. All new development must be of high quality design, with a clear vision as to the positive contribution the development will make to its local and wider context. As appropriate to the scale and nature of the development, proposals must:

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a. Preserve or enhance the character of the local urban and rural area and respond to its context in the wider landscape;
b. Conserve or enhance important natural and historic assets and their setting;
c. Include variety and interest within a coherent, place-responsive design, which is legible and creates a positive sense of place and identity whilst also responding to the local context and respecting local distinctiveness;
d. Be compatible with its location and appropriate in terms of scale, density, mass, form, siting, design, proportion, materials, texture and colour in relation to the surrounding area;
e. Deliver a strong visual relationship between buildings that comfortably define and enclose streets, squares and public places, creating interesting vistas, skylines, focal points and appropriately scaled landmarks along routes and around spaces;
f. Achieve a permeable development with ease of movement and access for all users and abilities, with user friendly and conveniently accessible streets and other routes both within the development and linking with its surroundings and existing and proposed facilities and services, focusing on delivering attractive and safe opportunities for walking, cycling, public transport and, where appropriate, horse riding;
g. Provide safe and convenient access for all users and abilities to public buildings and spaces, including those with limited mobility or those with other impairment such as of sight or hearing;
h. Ensure that car parking is integrated into the development in a convenient, accessible manner and does not dominate the development and its surroundings or cause safety issues;
i. Provide safe, secure, convenient and accessible provision for cycle parking and storage, facilities for waste management, recycling and collection in a manner that is appropriately integrated within the overall development;
j. Provide a harmonious integrated mix of uses both within the site and with its surroundings that contributes to the creation of inclusive communities providing the facilities and services to meet the needs of the community;
k. Ensure developments deliver flexibility that allows for future changes in needs and lifestyles, and adaptation to climate change;
l. Mitigate and adapt to the impacts of climate change on development through location, form, orientation, materials and design of buildings and spaces;

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m. Include high quality landscaping and public spaces that integrate the development with its surroundings, having a clear definition between public and private space which provide opportunities for recreation, social interaction as well as support healthy lifestyles, biodiversity, sustainable drainage and climate change mitigation;
n. Protect the health and amenity of occupiers and surrounding uses from development that is overlooking, overbearing or results in a loss of daylight or development which would create unacceptable impacts such as noise, vibration, odour, emissions and dust;
o. Design-out crime and create an environment that is created for people that is and feels safe, and has a strong community focus.

2. Larger and more complex developments will be required to submit Masterplans and Design Codes to agree an overall vision and strategy for a development as a whole that demonstrates a comprehensive and inclusive approach.

5.4 The NPPF (2012) sets out a clear national policy framework for promoting good design as a key element to achieving sustainable development and emphasises the indivisible link between good design and good planning (paragraphs 56-68).

5.5 All new development will have an impact on its surroundings. Development needs to be of an appropriate scale, design and materials for its location and conform to the design principles set out in the policy above. The aim must be that any development from a major urban extension to Cambridge to an extension to an existing home respects, preserves and enhances the special character of South Cambridgeshire generally and the locality specifically. Any development must also take proper care to respond to its surroundings, and create sustainable, inclusive and healthy environments where people would wish to live, work, shop, study or spend their leisure time. Well designed buildings and places contribute to the quality of life, increase economic vitality, achieve high environmental standards, reduce emissions and deliver a high quality public realm.

5.6 A fully integrated and responsive design-led approach to development is needed rather than design being approached as a simple checklist or as an optional extra. Policy HQ/1 establishes a set of fundamental design principles that should be applied to all development to ensure it contributes to social, economic and environmental sustainability and makes a positive difference to people's lives to help provide homes, jobs and better opportunities for everyone, whilst protecting and enhancing the natural and historic environment, and conserving the countryside and open spaces that are important to everyone. Applicants will be required to demonstrate how their proposals meet the principles of sustainability, by submitting a Sustainability Statement, under Policy CC/1 in Chapter 4 Climate Change.

5.7 The Government requires Design and Access Statements to be submitted with most planning applications, intended to demonstrate how a proposal is functional, attractive and accessible to all. Comprehensive guidance on their format and content is provided in the Council's Design & Access Statements Briefing Note.

5.8 Developments should be planned comprehensively in an integrated manner, not piecemeal. Some larger scale developments or complex sites can take a number of years to complete and are often delivered and planned in stages. In order to ensure developments take place in a coherent and structured way, Masterplans and Design Codes should be produced to agree an overall vision and strategy for a development as a whole at the outset. Guidance on what should be covered in Masterplans and Design Codes is provided in the District Design Guide Supplementary Planning Document (SPD).

5.9 Further guidance to support Policy HQ/1 will be provided in the review of the District Design Guide SPD. Other detailed local context information can be found in Conservation Area Appraisals. Some parish councils have prepared Village Design Guides, or are considering neighbourhood plans, which also provide local context. Other useful guidance on design includes: By Design (DETR, 2000); Urban Design Compendium (Llewelyn-Davies for English Partnerships, The Housing Corporation and Urban Design Alliance); Car parking what works where (English Partnerships); RECAP Waste Management Design Guide SPD (Cambridgeshire County Council 2012).

Public Art

Policy HQ/2: Public Art and New Development

1. The Council will encourage the provision or commissioning of public art that is integrated into the design of development as a means of enhancing the quality of development proposals, in particular from:
   a. Residential developments comprising 10 or more dwellings; and
   b. Other developments where the floor area to be built is 1,000m^2 gross or more, including office, manufacturing, warehousing and retail developments.

2. Where development is unable to achieve an appropriate scheme on site the Council will encourage developers to make a financial contribution to support public art initiatives. Financial contributions may be pooled (up to a maximum of five), where appropriate.

3. The provision of public art must involve the local community and could be community-led and have regard to the local circumstances of the site and/or local aspirations.

5.10 The provision of quality visual arts and crafts as part of new developments can bring social, cultural, environmental, educational and economic benefits, both to new development and the local community. Done well, public art that is designed to reflect and enhance its surroundings will help to raise the visual quality of developments, create a sense of place and through community involvement help with community development.

5.11 Public art can encompass a wide range of approaches. Integrated into the design to give a new development a sense of place and individuality. Public art could include designing a development so that functional elements such as lighting, seating, fencing, landscape, fountains and water features, and signage are bespoke or it could be a landmark work such as a sculpture. Alternatively, it could include provision of funding and/or space and facilities to enable performing arts which can help build new communities.

5.12 Public art will be sought though negotiation. An appropriate balance needs to be struck between all the competing demands on development and the benefits of public art. It is also important that public art is supported by the local community therefore proposals should be community-led to understand what is appropriate in their locality, having regard to the circumstances of the site.

5.13 Further guidance to support Policy HQ/2 will be provided in a District Design Guide SPD.

Chapter 6
Protecting and Enhancing the Natural and Historic Environment

Wimpole Hall, South Cambridgeshire

Chapter 6 Protecting and Enhancing the Natural and Historic Environment

6.1 South Cambridgeshire has over one hundred villages with many featuring beautiful buildings set within a wide range of landscapes. Land use and the underlying geology have combined to produce a very diverse landscape including the distinctive Chalklands, rolling Clay Hills and the wide expanses of the Fens to the north. South Cambridgeshire has extensive areas of high quality agricultural land with medium to large-scale arable farmland dominating. Within the fields and hedgerows, hills and valleys, woodlands and fen a variety of habitats exist for plant and animal species. The Council wants to make sure these landscapes with their biodiversity are protected for the future.

6.2 Many of South Cambridgeshire's villages have a quiet, rural character which belies their proximity to Cambridge or towns outside the district. The Council regards the Cambridge Green Belt as vital to retaining the rural character of land and villages around Cambridge. Within villages are green spaces of particular importance to local communities or views into open countryside which all help to create what is special about the villages in South Cambridgeshire. These special features need to be protected. The Cambridgeshire Green Infrastructure Strategy highlights opportunities for improving landscapes, enhancing biodiversity, enjoying heritage and getting out into the countryside.

6.3 People have lived and worked in the area since Palaeolithic times and the evidence of their lives is all around us. It can be found in the historic villages and landscapes and as archaeological remains beneath our feet. Roman roads, remains of medieval field systems, Gothic churches, Georgian parkland, nineteenth century model farms and twentieth century schools are just some examples. A number of historic buildings are at risk from neglect or lack of use while modern agriculture can be harmful to archaeology. Other challenges are retaining the special character of historic buildings and places while accommodating modern changes and new and growing settlements.

6.4 South Cambridgeshire has many heritage assets, ranging from the nationally designated historic parks and gardens, scheduled monuments and listed buildings to historic landscapes, archaeology and historic buildings of local interest. Some parts of our heritage have particular meaning and value to local communities. Conservation areas are based on groups of historic buildings but also seek to conserve and enhance other aspects of a village which make it special.

Key Facts:

- Five distinctive landscape characters in the district are identified by Natural England – from the Fens in the north to the Chalklands and Claylands to the south.
- The waterways flowing through the district are important wildlife corridors but other uses for recreation may put pressure on these environments. The River Cam is identified as a County Wildlife Site.

(continued)

- South Cambridgeshire has a diverse range of wildlife sites many of which are officially recognised for protection. These include 39 nationally important Sites of Special Scientific Interest and over 100 County Wildlife Sites. Development pressures can threaten the future of some habitats.
- Only one internationally important wildlife site exists within the district; the Eversden and Wimpole Woods Special Area of Conservation which is home to a breeding colony of the rare.
- The ancient woodlands and veteran trees in the district are invaluable for their biodiversity importance.
- The Cambridgeshire Green Infrastructure Strategy (2011) provides an overarching strategy for Cambridgeshire which highlights existing natural green space and opportunities for creating, linking, and improving it. It shows two major ecological networks: the Gog Magogs Countryside Area and the West Cambridgeshire Hundreds project.
- The area of the Green Belt in South Cambridgeshire comprises 23,000 hectares covering 25% of the district.
- The district has a very rich heritage with 2,672 listed buildings, 86 conservation areas and 103 scheduled monuments.
- Within the wider historic landscape are individual features such as Roman roads and ancient Dykes.
- Historic landscapes are particularly important in South Cambridgeshire where they add interest and variety to an intensively farmed countryside.
- Important visitor attractions with historic links include Wimpole Hall, Denny Abbey and the Imperial War Museum, Duxford. Impington Village College is a pioneering modernist building.

Conservation Area and Green Separation at Longstanton

Policy NH/1: Conservation Area and Green Separation at Longstanton

Areas of countryside within the conservation area at Longstanton will form part of the green separation between Longstanton and Northstowe. Public access to this area of countryside will be controlled to protect the conservation area. The area will contain only open land uses, such as playing fields, allotments and cemeteries, which will contribute towards effective separation between these communities. The open aspect of the fields affording views of All Saints Church will be maintained. Elsewhere the landscape character of a series of hedged paddocks, small copses and tree belts will be maintained and enhanced.

6.5 The green separation between Longstanton village and the new town of Northstowe is designed to ensure the maintenance of the village character of

Longstanton. Most of the area of green separation is covered by the Northstowe Area Action Plan, but part of the area lies outside its boundary and is covered by this policy. The land within the conservation area has a valuable character which should be preserved or enhanced. The predominant historic character of the open land comprises a series of paddocks with hedgerows and small copses, bounded by the tree-lined bridleway of Long Lane. Historically this is an important area and includes fields which still demonstrate remnants of the early ridge and furrow field system. Long Lane is a long established right of way and its Sylvan character is a key part of the setting of Longstanton.

Protecting and Enhancing Landscape Character

Policy NH/2: Protecting and Enhancing Landscape Character

Development will only be permitted where it respects and retains, or enhances the local character and distinctiveness of the local landscape and of the individual National Character Area in which is it located.

6.6 The importance of the landscape is reflected in national planning guidance with the National Planning Policy Framework (NPPF, 2012) stating that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes.

6.7 The South Cambridgeshire landscape has several distinctive and readily identified characters. These have been identified by Natural England as five distinct National Character Areas:

- The Fens
- South Suffolk and North Essex Claylands
- East Anglian Chalk
- Bedfordshire and Cambridgeshire Claylands
- Bedfordshire Greensand Ridge.

6.8 Within these national areas are a number of smaller and more detailed landscapes which add to and enhance the local landscape character of the district. The East of England Landscape Typology provides further detail on the landscape character within the National Character Areas, providing a finer grain of landscape assessment based on geology, landform, natural features, landscape patterns, vegetation, settlement patterns, and historic features and development. Each typology is also assessed in terms of Historic Features, Enclosure Patterns, Settlement Patterns and Historic Development.

6.9 The district's landscape is dominated by arable farmland with dispersed woodlands and often low, trimmed hedgerows. As a result it is a predominantly open landscape, allowing long views. A mosaic of hedgerow, fields, parkland and small woodlands create variety and combine to create an often treed skyline. A greater degree of enclosure and a more detailed landscape is often associated with settlements and the many small river valleys. Early enclosures of 'ancient

countryside' give a distinctive character to some villages which are surrounded by small fields with hedgerows.

6.10 There are pressures on these landscapes as a result of changes in agricultural practice and the impact of new development for housing and employment. These distinctive landscapes help create a quality natural environment within the district which needs to be enhanced and protected for the future. There will be opportunities to enhance the landscape particularly in the growth areas around Cambridge and elsewhere in the district as these new settlements and urban fringe sites are developed in the coming years. The Cambridgeshire Green Infrastructure Strategy identifies further opportunities for landscape enhancement within the district.

6.11 To assist in retaining the distinctive nature of the South Cambridgeshire landscape the Council provides more detailed guidance about landscape character areas in the District Design Guide Supplementary Planning Document (SPD) and the Landscape in New Developments SPD to ensure that development respects both the distinctiveness of these National Character Areas and the more detailed local landscapes. Within the lifetime of the Local Plan these SPDs will be reviewed to include the more detailed East of England Landscape Typology published by Landscape East further refining the landscape character areas within the district.

Protecting Agricultural Land

Policy NH/3: Protecting Agricultural Land

1. Planning permission will not be granted for development which would lead to the irreversible loss of Grades 1, 2 or 3a agricultural land unless:
   a. Land is allocated for development in the Local Plan**;**
   b. Sustainability considerations and the need for the development are sufficient to override the need to protect the agricultural value of the land.

2. Uses not involving substantial built development but which take agricultural land will be regarded as permanent unless restricted specifically by condition.

3. When considering proposals for the change of use or diversification of farmland, particular consideration shall be given to the potential for impact upon Priority Species and Habitats[1].

[1] Priority Species and Habitats are those that are identified within a Biodiversity Action Plan (BAP) and / or the Natural Environment and Rural Communities Act, 2006, Section 41.

6.12 The NPPF (2012) requires plans to take into account the economic and other benefits of the best and most versatile agricultural land. Where significant

development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality.

6.13 South Cambridgeshire has a significant resource of good quality agricultural land. Much of the best agricultural land lies around Cambridge and the larger settlements, which may be the most sustainable locations for future development. The need to identify and maintain a large supply of land for development means there is pressure for development of agricultural land. In addition, the impact of development on soils and the protection of soil quality must be considered.

6.14 Farmland is also important for biodiversity whether it is arable or pastoral. South Cambridgeshire being still a largely rural district has a large proportion of open farmland which has a variety of habitats on both high and low grade agricultural land. This provides an extensive biodiversity resource for the district. Due to the pressures of increasing land use and the past needs of intensive cultivation, the farmland of the district in places is under severe stress and this resource needs to be protected.

Biodiversity

Policy NH/4: Biodiversity

1. Development proposals where the primary objective is to conserve or enhance biodiversity will be permitted.

2. New development must aim to maintain, enhance, restore or add to biodiversity. Opportunities should be taken to achieve positive gain through the form and design of development. Measures may include creating, enhancing and managing wildlife habitats and networks, and natural landscape. The built environment should be viewed as an opportunity to fully integrate biodiversity within new development through innovation. Priority for habitat creation should be given to sites which assist in the achievement of targets in the Biodiversity Action Plans (BAPs) and aid delivery of the Cambridgeshire Green Infrastructure Strategy.

3. If significant harm to the population or conservation status of a Protected Species, Priority Species[1] or Priority Habitat resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission will be refused.

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4. Where there are grounds to believe that a proposal may affect a Protected Species, Priority Species or Priority Habitat, applicants will be expected to provide an adequate level of survey information and site assessment to establish the extent of a potential impact. This survey information and site assessment shall be provided prior to the determination of an application.

5. Previously developed land (brownfield sites) will not be considered to be devoid of biodiversity. The reuse of such sites must be undertaken carefully with regard to existing features of biodiversity interest. Development proposals on such sites will be expected to include measures that maintain and enhance important features and appropriately incorporate them within any development of the site.

6. Planning permission will be refused for development resulting in the loss, deterioration or fragmentation of irreplaceable habitats, such as ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

7. Climate change poses a serious threat to biodiversity and initiatives to reduce its impact need to be considered.

[1] Priority Species and Habitats are those that are identified within a Biodiversity Action Plan (BAP) and / or the Natural Environment and Rural Communities Act, 2006, Section 41.

6.15 National legislation and planning guidance place a duty on local authorities to consider biodiversity through their Local Plans. The Council is committed to the protection and enhancement of biodiversity and will work with partners to ensure a proactive approach to protection, enhancement and management of biodiversity identified in national and local strategies and plans such as Biodiversity Action Plans (BAPs) and the Cambridgeshire Green Infrastructure Strategy.

6.16 Whilst the need for development will be carefully considered against its impact on biodiversity, opportunities for biodiversity enhancement and the creation of new habitats can arise through sensitively located and carefully designed developments. For example, where habitats would be fragmented by new developments, it may be possible to create green corridors to reconnect habitats and assist species' movement and dispersal into the wider landscape thereby contributing to wider ecological networks.

6.17 BAPs provide guidance on targets and actions for habitats and species conservation. Further guidance on sites, species and habitats are set out in the Council's Biodiversity SPD. This also contains guidance for developers of how biodiversity should be considered in the development process.

6.18 It is recognised that climate change poses a serious threat to biodiversity. As a means to make biodiversity more resilient to climate change applicants will be encouraged to reduce habitat fragmentation and to strengthen ecological networks to aid migration, natural dispersal and the exchange of genetic material within species.

Policy NH/5: Sites of Biodiversity or Geological Importance

1. Proposed development likely to have an adverse effect on land within or adjoining a Site of Biodiversity or Geological Importance, as shown on the Policies Map (either individually or in combination with other developments), will not normally be permitted. Exceptions will only be made where the benefits of the development clearly outweigh any adverse impact.

2. In determining any planning application affecting Sites of Biodiversity or Geological Importance the Council will ensure that the intrinsic natural features of particular interest are safeguarded or enhanced having regard to:
   a. The international, national or local status and designation of the site;
   b. The nature and quality of the site's features, including its rarity value;
   c. The extent of any adverse impacts on the notified features;
   d. The likely effectiveness of any proposed mitigation with respect to the protection of the features of interest;
   e. The need for compensatory measures in order to re-create on or off the site features or habitats that would be lost to development.

3. Where appropriate the Council will ensure the effective management of designated sites through the imposition of planning conditions or Section 106 agreements as appropriate.

6.19 The NPPF (2012) states that to minimise impacts on biodiversity and geodiversity local planning authorities must identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them, along with areas identified by local partnerships for habitat restoration or creation.

6.20 South Cambridgeshire has a range of important sites and habitats for biodiversity, recognised through designations, from international to local importance. Some of these are also of geological importance. Sites of Biodiversity or Geological Importance are identified on the Policies Map and these represent a tiered network for the conservation of biodiversity and geodiversity within South Cambridgeshire.

These sites include the statutorily protected international (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and national (Sites of Special Scientific Interest (SSSIs) and the non-statutorily protected Local Nature Reserves and County Wildlife Sites.

6.21 The Conservation of Habitats and Species Regulations 2010, require all European Sites to be given full protection. Ramsar and potential SPAs or SACs are afforded similar protection as if they were legally designated. Natural England will be consulted on any planning application in or adjacent to a European Site, or any such candidate site. It is therefore a requirement that all proposals that might adversely affect the special interest of a European Site be given special scrutiny.

6.22 At present the only site of international importance within South Cambridgeshire is the Eversden and Wimpole Woods SAC. The site provides a habitat for a breeding colony of the barbestelle bat, one of the rarest bats in Western Europe. The bats have been recorded at a small number of other sites up to eleven kilometres from the Woods. The SAC is shown on the Policies Map. The area of particular interest for the bats' flight and feeding areas is shown within the Biodiversity SPD.

6.23 There are a number of other sites within the surrounding districts, which are considered as part of any Habitat Regulation Assessment carried out by the Council, because of their proximity to South Cambridgeshire and/or the nature of their conservation interest:

- Ouse Washes SAC and SPA
- Fenland SAC (Woodwalton Fen, Chippenham Fen, Wicken Fen)
- Portholme SAC
- Devil's Dyke SAC
- Breckland SAC and SPA

6.24 The Cambridgeshire Green Infrastructure Strategy has identified a strategic green infrastructure network across Cambridgeshire. Within the district it is important to retain and enhance the existing networks of natural habitats and the NPPF (2012) recognises the value of such networks. These networks may link sites of biodiversity importance and provide routes or stepping stones for the migration, dispersal and genetic exchange of species in the wider environment. In South Cambridgeshire such networks may include public rights of way, important roadside verges which need to be protected from road improvements or new access points, watercourses, ponds, moats, marshes and ditches that can be adversely affected by changes in local hydrology, woodlands, copses, pollarded willow and hedgerows, semi-natural grasslands and disused gravel, chalk or clunch pits. The management of such features is crucial to maintaining the existing biodiversity interest and to assisting further colonisation of habitats by various species. Further detail on these networks will be provided in the Biodiversity SPD.

6.25 Rivers, streams and drainage networks are particularly important features in South Cambridgeshire and make an important contribution to the biodiversity and landscape of the district. However these waterways are also a major recreation and tourism resource and careful management is required to

preserve the special qualities that attract users. In view of the specialist characteristics of river valley habitats and their importance to the biodiversity of the district as a whole, detailed guidance on the way in which development proposals should respect these habitats, natural features and characteristic species shall be included in the Council's Biodiversity SPD.

6.26 Public rights of way can often be green corridors in their own right, especially when in open arable countryside. Some rights of way can be up to 18 metres (60 feet) wide strips through the countryside, and should consequently be protected for the biodiversity opportunities that they provide. These corridors often co-exist with SSSIs, Local Nature Reserves, County Wildlife Sites, and Scheduled Ancient Monuments, and need to be very carefully managed to balance the complex rights and various statutory protections.

Green Infrastructure

Policy NH/6: Green Infrastructure

1. The Council will aim to conserve and enhance green infrastructure within the district. Proposals that cause loss or harm to this network will not be permitted unless the need for and benefits of the development demonstrably and substantially outweigh any adverse impacts on the district's green infrastructure network.

2. The Council will encourage proposals which:
   a. Reinforce, link, buffer and create new green infrastructure; and
   b. Promote, manage and interpret green infrastructure and enhance public enjoyment of it.

3. The Council will support proposals which deliver the strategic green infrastructure network and priorities set out in the Cambridgeshire Green Infrastructure Strategy, and which deliver local green infrastructure.

4. All new developments will be required to contribute towards the enhancement of the green infrastructure network within the district. These contributions will include the establishment, enhancement and the on-going management costs.

6.27 Green infrastructure is a strategic, multi-functional network of public green spaces and routes, landscapes, biodiversity and heritage. It includes a wide range of elements such as country parks, wildlife habitats, rights of way, bridleways, commons and greens, nature reserves, waterways and bodies of water, and historic landscapes and monuments. The network comprises rural and urban green infrastructure of different sizes and character, and the connections and links between them. It is part of (and contributes to) the

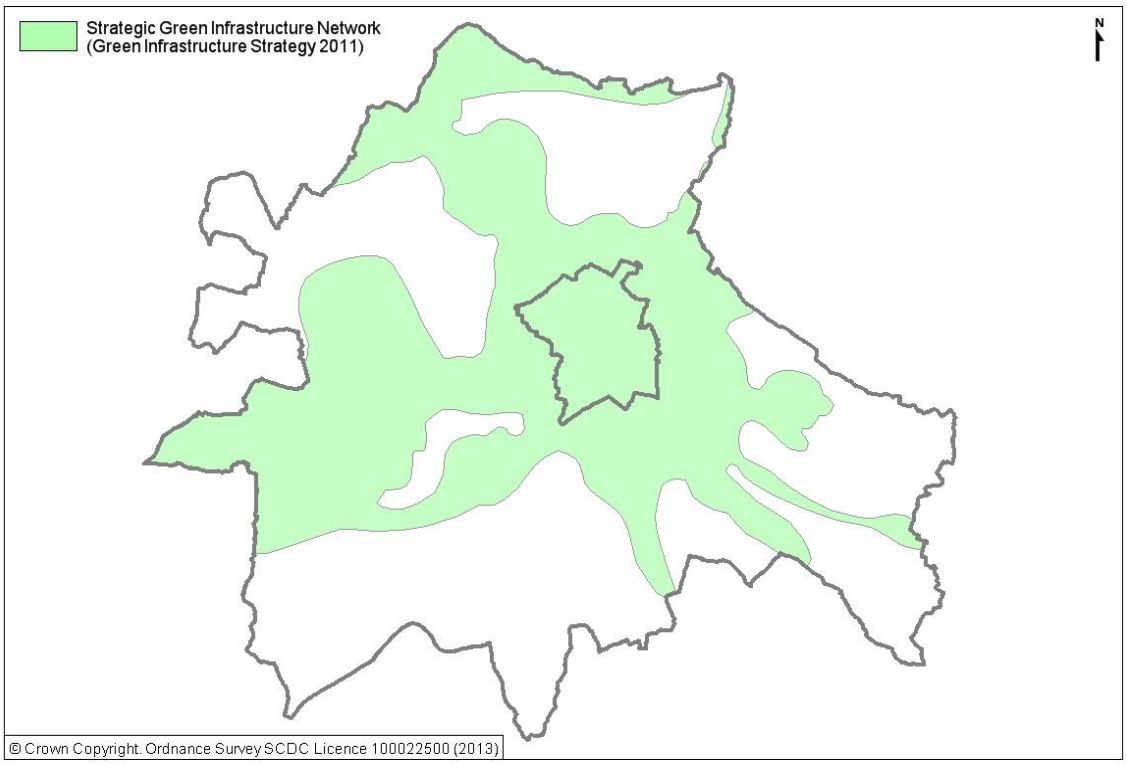
wider environment. It includes both land that can be open to the public and areas that are not accessible.

6.28 In 2011 a partnership of local organisations, including the Council, produced the Cambridgeshire Green Infrastructure Strategy which provides an overarching green infrastructure strategy and network for Cambridgeshire. In the NPPF (2012) it states that in order to minimise impacts on biodiversity and geodiversity, planning policies should plan for biodiversity at a landscape scale across local authority boundaries and this Strategy takes such an approach. The Strategy highlights shortfalls in green infrastructure which need to be addressed. The level of growth planned for South Cambridgeshire and Cambridge will put pressure on existing green infrastructure and will require investment to develop this network. Major developments create new demands and opportunities for green infrastructure. Delivery of green infrastructure can achieve many goals including linking different areas of green space, enhancing landscape character and creating more robust wildlife habitats, climate change adaptation, as well as delivering public access to countryside open space and supporting healthy lifestyles.

6.29 The Greater Cambridgeshire Local Nature Partnership has been set up to promote and deliver natural environment objectives and related benefits. A key role for the partnership is to be overseeing delivery of the Strategy.

6.30 The Cambridgeshire Green Infrastructure Strategy network is shown on Figure 7. The Strategy identifies a range of opportunities for enhancement in and around the district and has Cambridge and the surrounding area as one of its strategic areas. Each strategic area contains target areas and projects. Full details are included in the Cambridgeshire Green Infrastructure Strategy.

Figure 7: Green Infrastructure Strategy Network



6.31 The target areas in and around South Cambridgeshire are Northstowe; Wicken Fen and Anglesey Abbey; Cambridge; Cambourne; Wimpole; West Cambridgeshire Woodlands and Fen Drayton. The projects include Fen Drayton Lakes; RSPB habitat and visitor infrastructure management; Fens Waterways Link; Chalk Rivers project; Fowlmere Nature Reserve extension and development of facilities; linear monuments; woodland linkage project; enhanced rights of way links in Northstowe; Wicken Fen Vision; Wimpole cycle link; Cambridge fringe sites and Cambridge necklace projects. These take in projects in the Quarter to Six Quadrant part of the district which includes the parishes of Barton, Coton, Grantchester and Madingley. Other areas and projects outside the district will also be important to the residents of South Cambridgeshire. Green infrastructure projects will continue to come forward. An example of a Green Infrastructure project coming forward is a River Cam Corridor Strategy which is being prepared by local stakeholders, including the Council.

Ancient Woodlands and Veteran Trees

Policy NH/7: Ancient Woodlands and Veteran Trees

1. Planning permission will be refused for development resulting in the loss or deterioration of ancient woodland (as shown on the Policies Map) or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

2. Development proposals affecting ancient woodland or veteran trees will be expected to mitigate any adverse impacts, and to contribute to the woodland's or veteran tree's management and further enhancement via planning conditions or planning obligations.

6.32 The NPPF (2012) encourages local authorities to protect ancient woodlands and veteran or aged trees. Ancient woodland is defined as an area that has been wooded continuously since at least 1600 AD and such areas exist within South Cambridgeshire. Veteran trees are particularly valuable for biodiversity due to the large amount of deadwood that they may contain. These trees are defined by Natural England to be 'A tree which because of its great age, size or condition is of exceptional value culturally, in the landscape or for wildlife'.

6.33 Ancient woodlands and veteran trees represent an important constituent of green corridors across the district since they have a high inherent biodiversity value. Where there are trees within the application site, or on land adjacent to it that could influence or be affected by the development, information will be required on which trees are to be lost / retained, including whether any are ancient or veteran. It is best practice to undertake a tree survey in accordance with BS 5837 'Trees in relation to construction – Recommendations' to determine the significance and amenity value of trees on and near the site.

The Green Belt

Policy NH/8: Mitigating the Impact of Development In and Adjoining the Green Belt

1. Any development proposals within the Green Belt must be located and designed so that they do not have an adverse effect on the rural character and openness of the Green Belt.

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2. Where development is permitted, landscaping conditions, together with a requirement that any planting is adequately maintained, will be attached to any planning permission in order to ensure that the impact on the Green Belt is mitigated.

3. Development on the edges of settlements which are surrounded by the Green Belt must include careful landscaping and design measures of a high quality.

6.34 The NPPF (2012) gives strong protection to the Green Belt. The area of Green Belt in South Cambridgeshire comprises 23,000 hectares covering over 25% of the district. This means much of the district is affected by Green Belt policies particularly around those villages surrounding Cambridge. There are no villages within the Cambridge Green Belt, each is an 'island' inset within the Green Belt with its own defined development framework boundary.

6.35 Green Belt is a key designation in the district, which protects the setting and special character of Cambridge. Inappropriate development is by definition harmful to the Green Belt and will not be approved except in very special circumstances and in accordance with the approach set out in the NPPF (2012).

Redevelopment in the Green Belt

Policy NH/9: Redevelopment of Previously Developed Sites and Infilling in the Green Belt

1. Redevelopment of Previously Developed Sites and Infilling in the Green Belt will be inappropriate development except for:

   a. The re-use of buildings provided that the buildings are of permanent and substantial construction, are consistent with Policies E/17 and H/17, provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt;

   b. The extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building;

   c. The replacement of a building, provided the new building is in the same use, and not materially larger than the one it replaces;

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d. Limited infilling, where infilling is defined as the filling of small gaps between existing built development (excluding temporary buildings). Such infilling should have no greater impact upon the openness of the Green Belt and the purpose of including land within it than the existing development. The cumulative impact of infilling proposals will be taken into account.

e. The partial or complete redevelopment of previously developed sites (brownfield land), whether redundant or in continuing use (excluding temporary buildings), which would not have a greater impact on the openness of the Green Belt and the purpose of including land within it than the existing development.

6.36 There are existing developments within the Cambridge Green Belt, ranging from large institutions, to smaller groups of scattered development and individual buildings. NPPF (2012) paragraph 89 enables limited infilling or the partial or complete redevelopment of previously developed sites in the Green Belt in a number of specific circumstances.

Green Belt and Recreation Uses

Policy NH/10: Facilities for Recreation in the Green Belt

Proposals for new buildings to provide appropriate facilities for outdoor sport and outdoor recreation will be permitted where they will not (either individually or cumulatively) harm the openness of the Green Belt and the purposes of including land within it.

6.37 The Cambridge Green Belt plays an important role in providing opportunities for access to the countryside for local people. This is recognised in the Cambridgeshire Green Infrastructure Strategy.

6.38 The NPPF (2012) guidance on Green Belt at paragraph 81 requires local planning authorities to plan positively to enhance beneficial use of the Green Belt including through providing opportunities for outdoor sport and outdoor recreation. At paragraph 89 the NPPF (2012) allows for the provision of new buildings to provide appropriate facilities for outdoor sport and outdoor recreation that preserve the openness of the Green Belt and do not conflict with Green Belt purposes. With the growth proposed in the extensions around the City in the Cambridge Green Belt it is likely that land will become more intensively used, which could result in pressure for sport and recreational facilities being relocated to, or specifically developed on Green Belt land. It is

important this is done in a way which protects the overall rural character of the Green Belt rather than creating a character more associated with the urban environment.

Protecting Village Character

6.39 The character of villages is made up of a blend of buildings and open spaces. Given the pressure for development in the district, the remaining open land in and on the edge of villages is threatened. Some undeveloped land can be built on without harm to the character of the village and can contribute to the full and effective use of land in accordance with national policy, but others are important to maintain the village character and should not be developed. Some of these open spaces are particularly valued and cherished by the local community.

Policy NH/11: Protected Village Amenity Areas

Protected Village Amenity Areas are identified on the Policies Map where development will not be permitted within or adjacent to these areas if it would have an adverse impact on the character, amenity, tranquillity or function of the village.

6.40 Protected Village Amenity Areas (PVAAs) have been designated on sites within village frameworks in order to safeguard those areas of undeveloped land within villages which are important to retain. Some of the PVAAs may have important functions for the village such as allotments, recreation grounds and playing fields whilst others have an important amenity role in providing a setting for buildings or offer tranquil areas where there is minimum activity. Not all PVAAs have public access as some undeveloped areas which are important may be private gardens. They also vary from those which are very open to visual penetration to those which may be enclosed or semi-enclosed.

Policy NH/12: Local Green Space

Local Green Space identified on the Policies Map will be protected from development that would adversely impact on the character and particular local significance placed on such green areas which make them valued by their local community. Inappropriate development, as defined in the National Planning Policy Framework, would not be approved except in very special circumstances and in discussion with the local community.

6.41 The NPPF (2012) has created a designation called Local Green Space (LGS), which is for green areas of particular importance to local communities which once designated can prevent new development other than in very special circumstances. Local communities and parish councils in the district have helped the Council to identify the sites that are demonstrably special to their

local community. A LGS must hold a particular local significance, for example because of its beauty, historic significance, recreational value (including as a playing field), tranquillity or richness of its wildlife. The green area must be in reasonably close proximity to the community it serves. It must be local in character and not be an extensive tract of land. These sites can protect land outside of a development framework. A list of Local Green Space is provided in Appendix C.

Policy NH/13: Important Countryside Frontage

1. Important Countryside Frontages are defined where land with a strong countryside character either:
   a. Penetrates or sweeps into the built-up area providing a significant connection between the street scene and the surrounding rural area; or
   b. Provides an important rural break between two nearby but detached parts of a development framework.

2. Planning permission for development will be refused if it would compromise these purposes.

6.42 In many places land with a strong countryside character penetrates or sweeps into South Cambridgeshire's villages or separates two parts of the built-up area. Such land enhances the setting, character and appearance of the village by retaining the sense of connection between the village and its rural origins and surroundings. The frontage where this interface particularly occurs is identified to indicate that the frontage and the open countryside beyond should be kept open and free from development. In most cases it is land which adjoins the village built-up area but in some cases it separates two parts of the village and the open intervening land therefore assumes an importance for the character of the village as a whole.

Heritage Assets

Policy NH/14: Heritage Assets

1. Development proposals will be supported when:
   a. They sustain and enhance the special character and distinctiveness of the district's historic environment including its villages and countryside and its building traditions and details;
   b. They create new high quality environments with a strong sense of place by responding to local heritage character including in innovatory ways.

2. Development proposals will be supported when they sustain and enhance the significance of heritage assets, including their settings, as appropriate to their significance and in accordance with the National Planning Policy Framework, particularly:
   c. Designated heritage assets, i.e. listed buildings, conservation areas, scheduled monuments, registered parks and gardens;
   d. Non-designated heritage assets including those identified in conservation area appraisals, through the development process and through further supplementary planning documents;
   e. The wider historic landscape of South Cambridgeshire including landscape and settlement patterns;
   f. Designed and other landscapes including historic parks and gardens, churchyards, village greens and public parks;
   g. Historic places;
   h. Archaeological remains of all periods from the earliest human habitation to modern times.

6.43 A core planning principle of the NPPF (2012) is to conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations.

6.44 Heritage assets are buildings, monuments, sites, places, areas or landscapes which are significant because of their historic interest. They are irreplaceable but can be vulnerable to neglect or unsympathetic change.

6.45 The district's character is largely shaped by its heritage, including that of its much loved historic villages and countryside. Villages stand out in the landscape, with a variety of forms which respond to their locations such as at the edge of Fens or on hilltops or valley sides. Agricultural and foodprocessing buildings are characteristic, and the varied geology is reflected in traditional materials such as brick, tile, clunch and clay batt.

6.46 Challenges facing the historic environment include preserving the district's special rural character and scale of building, the degree of change generated by prosperity, the impact of intensive agriculture on historic landscapes and archaeology, the need to find new uses for traditional farm, food-processing and industrial buildings, and securing the future of unoccupied buildings such as historic garden pavilions. Understanding, conserving and enhancing the historic environment will be an essential part of master planning the growth planned within the district helping to create a sense of place.

6.47 The distinctive character and quality of life given by the historic environment of the area has been key to its economic success. Many important Hi-Tech and Bio-Tech organisations and businesses are based in large historic houses and their parkland settings. Strategic management plans are an important tool for achieving successful growth. Historic farm and industrial buildings can provide a range of size and type of premises for smaller businesses. Retaining historic pubs in use is important for village life as well as conservation.

6.48 Heritage is an essential component of plans from a village or neighbourhood level to that of the district. A full understanding of the historic environment, including traditional materials as used in vernacular buildings, is needed to inform plans, identify opportunities for conservation and enhancement, and to be able to reinforce local identity and create a sense of place.

6.49 The conservation of heritage assets does not prevent all change but requires it to be managed in a way which does not compromise heritage significance and exploits opportunities for enhancement. Section 12 of the NPPF (2012) provides guidance regarding the consideration of development proposals on heritage assets. In summary the more important the asset, the greater the weight should be applied to its conservation. Where development would lead to the substantial harm or total loss of significance of a designated asset, the local planning authority should refuse consent unless demonstrated it is necessary to achieve substantial public benefit that outweigh the harm or loss. Proposals leading to less than substantial harm to the significance should also be weighed against public benefits of the proposal. For proposals affecting non-designated assets a balanced judgement will be made, having regard to the scale of any harm or loss and the significance of the heritage asset.

6.50 Non-designated heritage assets of archaeological interest which are of equal significance to scheduled monuments will be considered in the same way as designated heritage assets.

6.51 Finding viable uses which sustain rather than compromise the significance of historic buildings is fundamental to conservation (though not possible for all buildings). The need to secure the future of buildings may require a flexible approach to other policies or enabling development, Section 106 agreements and other planning contributions. Buildings at risk will be monitored and action

taken to secure their repair and encourage sustaining uses. The Council is committed to ensuring the future viable uses of assets within the district.

6.52 Decisions on development proposals must be based on a good understanding of how the proposals will affect heritage. Applicants must describe the significance of any heritage assets, including any contribution from their setting. The level of detail must reflect the importance of the asset and clearly identify the potential impact of the proposal.

6.53 Where development is proposed for a site which includes or has the potential to include heritage assets with archaeological interest, developers must submit an appropriate desk-based assessment and, where necessary, a field evaluation.

6.54 Prospective developers should contact the County Council's Historic Environment Team for information to establish whether there is known or potential archaeological interest and the need for investigation and evaluation at an early stage.

6.55 Different levels of information are available on different types of heritage asset and parts of the district. For some development proposals, more research will be required. It will always be important to investigate sites and their context on the ground.

6.56 The Cambridgeshire Historic Environment Record, maintained by the County Council, provides information on heritage assets, including non-designated and designated heritage assets with archaeological interest. Other information on heritage assets and local heritage character is available on national websites, from the County Council's Historic Environment Team, and in District Council Conservation Area Appraisals and SPDs. The Council's web site and officers will give advice on sources of information.

6.57 Where development resulting in the loss of a heritage asset is permitted, the developer will be required to record and advance the understanding of the heritage asset to be lost. The results of assessments and investigations which are required and collected as part of development management are of public interest and will be made accessible, normally through the Cambridgeshire Historic Environment Record.

6.58 The Council encourages people to be involved with and enjoy local heritage and, where appropriate, developers will be required to support public understanding and engagement, and interpretation.

Heritage Assets and Adapting to Climate Change

Policy NH/15: Heritage Assets and Adapting to Climate Change

1. The retention and re-use of historic buildings and other heritage assets will be encouraged and supported as a sustainable resource.

2. Proposals for energy efficient and renewable energy measures for historic buildings which adequately safeguard their heritage significance will be permitted.

6.59 Historic buildings and settlements often have sustainable forms of construction and design, and they can inform and inspire the best modern, sustainable development. Their survival reflects their success and adaptability. Conserving and re-using historic buildings retains their materials and 'embodied energy' which is the energy used in materials and construction.

6.60 The energy efficiency of buildings is covered in Chapter 4: Climate Change. However, the implications of energy efficient and renewable energy measures for historic buildings need special consideration. Historic buildings are normally constructed and perform in a different way to modern buildings and the measures should be compatible with an individual building's characteristics as well as its heritage significance.

6.61 There are opportunities in most historic buildings to improve energy conservation without causing harm, through measures such as secondary glazing, improved loft insulation using natural materials, low energy lighting, and fuel efficient boilers. In some situations, renewable energy technologies can also be installed without causing harm.

6.62 When proposals will have a potentially negative impact on heritage assets, then alternative solutions which cause no or less harm should be identified. Where conflict between climate change objectives and the conservation of heritage assets is unavoidable, then the public benefit of mitigating the effects of climate change will be weighed against the harm to the significance of the heritage assets.

6.63 English Heritage provides guidance on how heritage assets can be acceptably adapted to reduce their carbon footprint. The Council's Listed Buildings SPD provides guidance on general sustainability, improving energy efficiency and renewable energy related to listed buildings. The Council will produce supplementary guidance which will set out ways in which the environmental performance of heritage assets can be improved without compromising their significance, taking account of new approaches and innovations.