1. INTRODUCTION

1.1 What is sustainable design and construction?

1.1.1 The way in which buildings are designed, constructed, operated and decommissioned has a significant impact on the built and natural environment, and requires major resource inputs such as energy, water and materials. Designing and constructing buildings which help to minimise the consumption of these resources and minimise construction waste can not only reduce the borough’s carbon footprint, but also reduce costs for developers and occupiers.

1.1.2 Sustainable building and construction is therefore an essential part of the response to the challenges of climate change, natural resource depletion, habitat loss and wider environmental and social issues.

1.2 What is the purpose of this advice note?

1.2.1 This advice note provides further information regarding the Council’s approach, and requirements, relating to issues of sustainable design and construction. It supplements, and where appropriate updates, the adopted Core Strategy\(^1\) (September 2013) and is intended to be read alongside this.

1.2.2 It is intended to assist developers in ensuring that new development such as an extension, a conversion, and new homes and commercial buildings maximise energy efficiencies, minimise the use of natural resources and waste, and reduce carbon emissions to avoid compromising the needs of the future.

2. POLICY CONTEXT

2.1 National

2.1.1 The Climate Change Act 2008 sets legally binding targets for greenhouse gas emissions reductions. It aims to:
   - reduce carbon dioxide emissions by at least 26% by 2020; and
   - reduce carbon dioxide emissions through domestic and international action of at least 80% by 2050.

2.1.2 The Planning system has an important role to play in ensuring these objectives are met.

National Planning Policy Framework

2.1.3 The National Planning Policy Framework (NPPF) recognises the key role that planning plays in helping secure reductions in greenhouse gas emissions, improving resilience to the impacts of climate changes and supporting the delivery of renewable and low carbon energy and associated infrastructure. It notes that this is central to the economic, social and environmental dimensions of sustainable development.

2.1.4 The NPPF states that in determining planning applications, local planning authorities should expect new development to:
   - comply with adopted Local Plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that it is not feasible or viable; and
   - take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption. (Paragraph 96)

2.1.5 Local planning authorities are also required to:
   - have a positive strategy to promote energy from renewable and low carbon sources;
   - design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;
   - Consider identifying suitable areas for renewable and low carbon energy sources and supporting infrastructure, where this would help secure the development of such sources;
   - Support community-led initiatives for renewable and low carbon energy, including development outside such areas being taken forward through neighbourhood planning; and
   - Identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers. (Paragraph 97)

Planning Practice Guidance

2.1.6 The Planning Practice Guidance (PPG) adds further detail to the advice within the NPPF. Please refer to the website for the latest version of this advice:
2.1.7 Until March 2015 the Code for Sustainable Homes was the national standard for the sustainable design and construction of new homes. It aimed to reduce carbon emissions and promote higher standards of sustainable design above the standards that existed at the time within the Building Regulations. The standards were expressed on a scale from 1-6 with zero carbon emission being the highest at code level 6. The Council had regard to these national requirements when drawing up its Core Strategy and this is reflected in Table 10 from the Core Strategy where details of targets related to the code were given for different categories of development projected over time.

2.1.8 BREEAM was a similar national standard that applied to non-residential, and less commonly, residential development.

**Housing Standard Review**

2.1.9 Following the technical Housing Standards Review, Government issued a written Ministerial Statement in March 2015 withdrawing all national standards that applied to residential development. This had the impact of cancelling the Code for Sustainable Homes and BREEAM as it pertains to residential development, aside from the management of legacy cases. Legacy cases are defined as:

- those where residential developments are legally contracted to apply a code policy (e.g. affordable housing funded through the National Affordable Housing Programme 2015 to 2018, or earlier programme); and/or
- where planning permission has been granted subject to a condition stipulating discharge of a code level, and developers are not appealing the condition nor seeking to have it removed or varied.

2.1.10 The Housing Standards Review has seen Government move to restrict planning departments from imposing locally defined technical building standards on new residential developments. The aim is to provide consistent and uniform guidance for developers, removing the complication presented by numerous local standards.

2.1.11 Following the demise of the Code for Sustainable Homes (and residential BREEAM) the Building Regulations will continue to be the bar against which applicants for residential development will have to demonstrate that they are meeting the goals of the Government’s green agenda. The forthcoming autumn 2016 amendments to the Conservation of Fuel and Power Part L Building Regulations will be the equivalent at the Code Level 4. In light of this change, Development Management will cease to set requirements upon residential applicants concerning sustainable design and construction since these are now encapsulated within the updated Building Regulations. However Development Management will continue to encourage and guide applicants concerning these
matters through the application of policies in the Development Plan and this advice note.

2.1.12 BREEAM standards of ‘Good’ and ‘Excellent’ can still be sought for non-residential development.

2.2 Local

Local Planning Framework

2.2.1 The Dacorum Borough Local Plan 1991-2011 was adopted in 2004. Its policies are being replaced through the Council’s Local Planning Framework (LPF). The central document of the LPF, the Core Strategy, was adopted in September 2013. It includes a number of policies aimed at securing sustainable development.

2.2.2 Key policies include the following:

<table>
<thead>
<tr>
<th>Policy Number</th>
<th>Policy Title</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Strategy Policies</strong></td>
<td></td>
<td></td>
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<tr>
<td>CS8</td>
<td>Sustainable Transport</td>
<td>Outlines support for non-motorised transport and encouraging model shift to public transport.</td>
</tr>
<tr>
<td>CS10</td>
<td>Quality of Settlement Design</td>
<td>A series of policies aimed at improving the design quality of new development. Includes requirements to consider issues such as the orientation of buildings and choice of materials, which have are important factors in sustainable design and construction.</td>
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<tr>
<td>CS11</td>
<td>Quality of Neighbourhood Design</td>
<td></td>
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<tr>
<td>CS12</td>
<td>Quality of Site Design</td>
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<tr>
<td>CS13</td>
<td>Quality of the Public Realm</td>
<td></td>
</tr>
<tr>
<td>CS28</td>
<td>Carbon Emission Reductions</td>
<td>Outlines the council's commitment to reducing carbon emissions</td>
</tr>
<tr>
<td>CS29</td>
<td>Sustainable Design and Construction</td>
<td>Outlines a series of standards that all new developments “will” be required to satisfy listed from a) to l). It also requires applicants to explain how the buildings will be designed to have a long life and adaptable layout. In instances where on-site energy or tree planting is not possible applicants would be expected to contribute towards sustainability offsetting. If a scheme would be unviable or there is not a technically feasible approach, the</td>
</tr>
</tbody>
</table>
principles of the policy could be relaxed. It states that for “specific” types of development applicants should provide a Sustainability Statement. Linked to the policy was Checklist 29 that all new build applicants were required to complete that mirrored the contents of this policy.

<table>
<thead>
<tr>
<th>CS30</th>
<th>Carbon Offsetting</th>
<th>Details scope for sustainability offsetting</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS31</td>
<td>Water Management</td>
<td>A series of policies aimed at supporting the management of water and in particular flood protection and prevention. Also outlines requirements to meet air, soil and water quality standards.</td>
</tr>
</tbody>
</table>

2.2.3 The Council’s approach to carbon emissions and renewable energy is guided by the energy hierarchy (Figure 1 below). Carbon emission reductions should therefore be delivered primarily through improvements to the energy efficiency performance of the building. This means that actions such as improving the air tightness of buildings will be encouraged before resorting to renewable energy technologies in order to achieve carbon emission reductions.

Figure 1: Energy Hierarchy

Opportunities for District Heating

2.2.4 In line with Government guidance in the NPPF (paragraph 97), the Council has
identified locations where renewable and low carbon energy sources should be particularly encouraged. These locations, referred to as District Heating Opportunity Areas (DHOAs), have been identified in the Hertfordshire-wide Low and Zero Carbon Study (2010) and are illustrated in Map 4 of the Core Strategy.

2.2.5 The greatest potential to accommodate high density development and hence generate a high heat demand are focussed upon the borough’s larger settlements, the Maylands Business Park and large-scale green field developments. For major new development proposals² within these locations, the Council expects careful consideration to be given to the opportunities to deliver district heating networks or other forms of decentralised energy and for developers to maximise carbon emission reductions. Table 10 of the Core Strategy indicates the scale of the reductions that we would encourage above those now required by Building Regulations.

2.2.6 Further information on DHOAs will be set out within future supplementary planning documents.

Offsetting

2.2.7 The Council is currently exploring ways to apply carbon and other forms of offsetting in accordance with Policy CS30: Sustainability Offsetting. A Sustainability Offset Fund is not currently in operation, so there is no formal mechanism in place at the present time to off-set carbon emissions.

² Defined as development of 10 dwellings and above and/or 1000sqm of non-residential floor space or above.
3. GUIDANCE

3.1 Background

3.1.1 The policy approach set out in the Core Strategy is aimed at ensuring consideration is given to sustainability at all stages of the development process, as illustrated in Figure 2 below.

Figure 2: Components of Sustainable Design and Construction

3.1.2 Precise requirements will depend upon the type and scale of development proposed. Further advice relating to different types of development is set out below.

3.2 New Development

Sustainability and Energy Statements and the C29 Checklist

3.2.1 Policy CS29 requires applicants to provide a Sustainability Statement for specified types of development. Until July 2016 this statement was completed electronically via the Council’s sustainability planner webpage CPlan. The statement would help determine the sustainability credentials of the proposal, in
terms of land use, environmental considerations, community and employment needs, and in its design and access arrangements. In order to ensure explicit compliance with the requirement of Policy CS29: Sustainable Design and Construction, a separate short checklist comprising the CS29 policy criteria was also available which was applicable to all new development. Developers were encouraged to submit this completed checklist alongside their planning application to explain how each criterion had been taken into account when drawing up the scheme. For larger developments an online Energy Statement was additionally required through CPlan.

3.2.2 The Council no longer use the services of CPlan. In light of the demise of the Code for Sustainable Home Development Management no longer requires applicants to submit a Sustainability or Energy Statement. The issues that these matters relate to are dealt with in part by the updated Building Regulations. However the Council still requires certain applications (defined below) to be supported by a sustainable development checklist available at:

http://www.dacorum.gov.uk/docs/default-source/planning-development/cs29-checklist.docx?sfvrsn=0

3.2.3 This is an updated version of the previous Policy CS29 Checklist, expanded to cover other relevant Core Strategy policy considerations. The updated checklist is entitled Sustainable Development Checklist. The following types of application for new development need to complete and submit this checklist:

   a. All residential houses and flats
   b. Residential refurbishments, conversions and change of uses for:
      i. 10 or more dwellings, or
      ii. 500sqm or more floor space
   c. Multi Occupation residential buildings with 7 or more bedrooms (e.g. retirement homes)
   d. Non-residential development of 500sqm or more floor space (including offices, retail and industrial, excluding parking and landscape areas).

3.2.4 Table 10 of the Core Strategy sets out the scale of reductions that the Council required developers to achieve in order to accord with Policy CS28: Carbon Emission Reductions and criteria (f) of Policy CS29: Sustainable Design and Construction.

3.2.5 Following the abolition of the Code for Sustainable Homes, to which this table refers, applicants will now be encouraged (as opposed to required) to meet the requirements within Table 10. (Applicants should note that the autumn 2016 amendments to the Conservation of Fuel and Power Part L Building Regulations will be set close to the Code Level 4.)

3.2.6 Please note a threshold of 10 or more residential units, rather than 5 as specified in Table 10 of the Core Strategy, will be adopted. This mirrors the threshold for classification as a ‘major’ development scheme as noted above.

Solar photovoltaic panels
3.2.7 In most cases, unless the building is listed or within a Conservation Area, planning permission is not required for the installation of photovoltaic (PV) panels on roofs. Listed building consent will be required if the property is listed.

3.2.8 More detailed guidance is available from the Planning Portal: [http://www.planningportal.gov.uk/permission/commonprojects/solarpanels](http://www.planningportal.gov.uk/permission/commonprojects/solarpanels)

**Paving of front gardens**

3.2.9 If you are considering paving over your front garden planning permission may be required depending on the area, design and materials used (for further information please refer to Schedule 2 Part 1 Class F of the General Permitted Development Order 2015). Further advice about how you can provide off-street parking whilst reducing water run-off is available from the Planning Portal: [http://www.planningportal.gov.uk/permission/commonprojects/pavingfrontgarden](http://www.planningportal.gov.uk/permission/commonprojects/pavingfrontgarden)

### 3.3 Use of Standard Conditions

3.3.1 Generally, the Council as local planning authority wishes to resolve sustainability matters at full planning application stage through the submissions of appropriate details to address matters covered by relevant development plan policies and both this advice note and the sustainability checklist, and in doing so avoid the need for pre-commencement conditions.

3.3.2 However, when these details are not submitted at full application stage, the Council will often impose one or more conditions based on the following standard conditions when determining planning applications, relating to issues pertaining to sustainable design and construction:

**SUS1**

Notwithstanding any details submitted as part of the planning application, prior to the commencement of the development hereby permitted, plans and details showing how the development will provide for renewable energy and conservation measures, and sustainable drainage and water conservation shall be submitted to and approved in writing by the local planning authority. The approved measures shall be provided before any part of the development is first brought into use and they shall thereafter be permanently retained.

**Reason:** To ensure the sustainable development of the site in accordance with the aims of policy CS29, and policies CS28 to CS32 of the Core Strategy and adopted Supplementary Planning Guidance.
3.4 Resources

3.4.1 With the demise of the Code for Sustainable Homes the Council, as Local Planning Authority, will no longer be able to request particular Code compliance for residential development. These issues will instead be covered through the updated Building Regulations. Applicants are no longer required to use CPlan but certain developments (defined in section 3.2.3 above) will be required to complete and submit the new Sustainable Development Checklist. This is available from www.dacorum.gov.uk/planning. The Council will continue to support the principles of sustainable design and construction which is enshrined within its planning policies. Applicants are also encouraged to refer to Building Futures for further guidance.

3.4.2 Building Futures is an online resource developed by Hertfordshire County Council in association with 8 district and borough Councils in the county. It comprises a Sustainable Design Toolkit to aid decision-making on sustainable design and construction at the initial concept, pre-application and planning application stages. By using open questions and best practice guidance, the Toolkit helps development stakeholders consider and implement the principles and practice of sustainable design in a highly visual and engaging way:

http://www.hertslink.org/buildingfutures
4. FURTHER INFORMATION

4.1 For further information about Sustainability and Energy Statements and how to make developments more sustainable, please visit:

- Building Futures - http://www.hertslink.org/buildingfutures
- BRE – www.bream.org and www.bre.co.uk
- Energy Saving Trust - www.energysavingtrust.org.uk
- Planning Portal - www.planningportal.gov.uk
- DBC Core Strategy 2013 (in particular sections 18.18-18.23)

4.2 Estimates of the costs and benefits of micro-generation and energy efficiency projects can be obtained by using Encraft’s free online calculators: http://gateway.encraft.co.uk/home/index

4.3 Further information about how to submit a planning application is available on the Council’s website: www.Dacorum.gov.uk/planning