### Design and Access Statement – Householder Development ENVIRONMENTAL MANAGEMENT MEASURES TO COMBAT CLIMATE CHANGE

This is intended to encourage applicants to incorporate sustainable features in the design. It is not relevant to householder applications outside Conservation Areas...

Please read the checklist to assist in you in completing the Design and Access Statement. Refer to any of the measures listed in the checklist which you propose to incorporate into your scheme.. There may be some cases where the Authority insists on the use of some of the features specified.

# <u>Water Conservation-</u> Reducing dependence on mains water in new development, improve efficiency in the use of water and conserve water resources.

Have you considered specifying water-conserving fittings for taps and sanitaryware? (e.g. low flush w.c.s, spray taps, water-saving showers)

Can rainwater be collected from roofs for outdoor use? (e.g. water butts installed for garden irrigation)

Have you considered designing in rainwater harvesting measures to collect rainwater and store it for use internally? (e.g. w.c. flushing)

Have you considered providing a system to re-use greywater (waste water from baths, showers and basins) for irrigation or w.c. flushing?

#### Sustainable Drainage Systems (SUDS)

Building in measures to respond to the predicted increase in rainfall without increasing the risk of flooding. To slow down rainwater runoff and minimise vulnerability to flooding.

SUDS are made up of one or more structures built to manage and capture surface water run off. They are used in conjunction with good management of a site to prevent flooding and pollution. Some of the structures can also provide sustainable habitats for wildlife. <a href="http://publications.environmentagency.gov.uk/pdf/GEHO0308BNST-e-e.pdf">http://publications.environmentagency.gov.uk/pdf/GEHO0308BNST-e-e.pdf</a>

Has the proposal maximised the use of impermeable paving for drives and parking areas?

Can water be provided by capturing surface water drainage from roofs and other hard surfaces be provided instead of piped mains drainage? (e.g. soakaways, filter strips, swales, balancing ponds etc)

Have you considered using SUDS techniques that will include features that will make a contribution to amenity or wildlife? (e.g. balancing ponds, reed beds, green roofs etc)

#### **Use of Resources**

Has the design made use of locally sourced materials?

Have you explored ways to re-use existing building materials?

### Site Layout and Building Design

Reducing CO2 emissions by lowering energy demands for heating and cooling. Building in resilience to climate change to ensure thermal comfort.

Is the proposed site layout designed to make the maximum use of energy from the sun (passive solar gain)? (e.g. main glazed elevations within 30° of south)

Have you designed in measures to prevent excess solar gain in summer? (e.g. brise soleil, shutters).

Has the design made maximum use of natural ventilation?

Has the design made maximum opportunity for the use of natural daylight rather than artificial lighting?

Have you designed the layout to use landform and landscape to benefit from shelter?

Have you considered how existing and proposed trees and shrubs could be used to provide shade for outdoor areas?

Have you considered the potential for passive cooling in summer?

#### Energy

# Reducing CO2 emissions by building developments that use sustainable and renewable energy

How will the design reduce the use of energy (e.g through thermally massive materials, levels of insulation, courtyards and the use of green roofs?

Has the design made use of heat recovery from waste water? (e.g. warming incoming cold water through a heat exchanger where it is pre-warmed by heat from greywater flowing out from such activities as showering and washing machines.

Has the design incorporated energy efficient and energy saving devices for lighting and heating?

Have you explored ways that are compatible with National Park purposes to generate renewable energy on site as part of the development ?( eg solar thermal, photovoltaic, ground source heat pumps or wood fuel burners)

You may wish to research other sustainable design measures as set out in the Code for Sustainable Homes

(<u>www.planningportal.gov.uk/uploads/code\_for\_sustainable\_homes\_techguide.pdf</u>). If so please specify in your Design and Access statement