

APPENDIX 7.6

DESIGN GUIDE INPUTS

For the development of the detailed design on the outline plots, climate adaptation shall be considered. This includes the following:

Overheating:

A thermal analysis of the buildings will be required to demonstrate the resilience of the development and how the development can be adapted for a projected climate change environment (specifically for heating and increased humidity). This should be based on projected increases in temperature due to climate change over the life-cycle of the development in accordance with the latest available climate change projections for the UK. Shaded areas will be incorporated into the landscape to provide refuge and shelter. The design should also consider how extreme heat events could lead to failure of sensitive equipment at high temperatures and how extreme heat events could lead to grassland fires.

Water stress:

An assessment of water stress should be considered in the context of climate change over the life-cycle of the development. Water-saving measures shall be maximised in each development proposal.

Flooding:

The development should incorporate mitigation measures to reduce the risk of localised flooding. Any flood risk analysis undertaken will include climate change considerations in accordance with the latest available climate change projections for the UK.

Drainage and water supply:

Changes in drainage, water stress and soil shrinkage associated with climate change should be considered in the design.

Landscaping:

Climate change projections for the UK should be considered when designing any additional landscaping strategies, for example drought resistant species should be selected, along with increased requirement for irrigation, and a consideration of the change in pests, diseases and flooding.

Long-term management:

A Climate Change Adaptation plan should be produced, covering the design and management of the development. This should focus on building adaptive capacity into the design and avoiding adaptation constraining decisions.

The design should also consider damage to building materials associated with increased temperatures and high winds in accordance with the latest available climate change projections for the UK.