# Annex B Draft Core Strategy Submission Flood Risk Chapter

LDF Working Group 14th March 2011

# Section 19: Flood Risk

#### Strategic Objective

The Local Development Framework (LDF) will ensure that new development is not subject to flooding, does not contribute to flooding and is designed in a way that takes account of both existing and future flood risk.

#### **Targets**

Progress towards meeting the strategic objectives will be measured against the following targets:

- No planning permissions granted contrary to the advice of the Environment Agency on flood risk and water quality grounds.
- All brownfield development, where technically feasible and viable, to achieve a 30% reduction in run-off rates.
- All greenfield development, where technically feasible and viable, to achieve no worsening of run-off rates.
- The production of a Supplementary Planning Document (SPD) relating to Sustainable Design and Construction and all development meeting the requirements set out in this document.

#### Policy CS22: Flood Risk

The LDF will ensure that new development is not subject to flood risk, incorporates sustainable drainage and is designed and constructed in a way that mitigates against current and future flood events.

#### Flood Risk

In considering the suitability of any proposed development site, either through the Allocations Development Plan Document process or when determining planning applications, the Council will use the 'Flood Risk Vulnerability Classification' and 'Flood Risk Vulnerability and Flood Zone Compatibility Classification' tables from the *Strategic Flood Risk Assessment* (2011) and any subsequent updates.

In addition, a site-specific Flood Risk Assessment, which takes account of future climate change must be carried out:

- when allocating sites through the LDF process; and
- for all planning applications of 1 hectare or greater in Flood Zone 1 and for all applications in Flood Zones 2, 3a, 3a(i) and 3b.

#### Sustainable Drainage

All new development will be required to include the implementation of Sustainable Drainage Systems (SUDS) unless it can be demonstrated that it is not technically feasible or viable.

#### More specifically:

- all brownfield development in York will be required to demonstrate that there will be a reduction of at least 30% in existing runoff rates; and
- all greenfield development must demonstrate no alteration of runoff rates following completion of development. Any additional volume of runoff following development of a greenfield site must be taken into account by providing longterm storage.

Retrofitting for flood prevention and SUDS within the existing built environment must be explored where it would not damage environmental assets.

### Design and Construction

The LDF will ensure that the design and construction of new development takes account of existing and future flood risk particularly given the implications of climate change. Further advice on this issue will be provided through the production and adoption of a Supplementary Planning Document (SPD) relating to Sustainable Design and Construction.

## Explanation

- 19.1 Flood risk is a particularly important issue for York. The City has a history of flooding and the management of flood risk continues to be essential, particularly following the numerous major flooding events witnessed in the City in recent years. It is the characteristics of the York river catchment, in addition to the significant amount of rainfall it receives that makes York particularly susceptible to flooding. It is anticipated that the flooding threat will increase as a result of climate change, due to more intense rainfall and increased peak river flows. Development in inappropriate locations such as floodplains will exacerbate the problems associated with climate change.
- 19.2 The approach taken in *Planning Policy Statement 25 (2010)* aims to reduce the risks from flooding to people and both the natural and built environment. It provides national planning principles for the location of new development in relation to flood risk, directing development to the lowest areas of flood risk, advocating a risk-based 'Sequential Test' approach. However national policy also recognises that exceptions may be necessary in certain circumstances where there are no suitable lower risk sites, this requires the application of the 'Exception Test'.
  - 19.3 Only after the Sequential Test has been applied can the Exception Test be undertaken. The Exception Test approach recognises the need to balance wider sustainability issues with flood risk. This test involves the consideration of whether the proposed development contributes to sustainable development in its wider sense, is located on brownfield land and whether a detailed site specific flood risk assessment indicates that the development will be safe and will not increase flood risk elsewhere. The Exception Test essentially allows a balance to be struck in some instances between flood risk and wider sustainability objectives, for example where a highly accessible brownfield development site lies within a high flood risk zone.

- 19.4 The City of York Council have completed an updated *Strategic Flood Risk Assessment (2011)* (SFRA) which assesses the different levels of flood risk in the York area and provides advice on what development is appropriate in each flood risk zone. Together with the Sequential and Exception Tests the *SFRA (2011)* will assist in identifying sites for development through the LDF and when determining planning applications. The high flood risk zones (3a, 3a(i) and 3b) taken from York's SFRA maps have also helped inform the Spatial Strategy and are illustrated at Figure 3.6 within Section 3 'Spatial Strategy'.
- 19.5 The majority of watercourses in York are up to maximum capacity. This is recognised in the policy above. Where technically feasible and financially viable, runoff rates for development will be restricted to:
  - existing runoff rates (if a brownfield site), based on 140 litres/second/hectare, in accordance with *The Building Regulations Part H Drainage and Waste Disposal* (2000 amended 2010), with a reduction of 30% in runoff where practicable; or
  - unless otherwise calculated, agricultural runoff rates (if the site has no previous development) will be based on 1.4 litres/second/hectare. To achieve this additional run off volumes will require balancing.
- 19.6 The use of SUDS must be considered, to enable the run-off targets to be met. SUDS provide a method of discharging surface water in a sustainable way to reduce the risks of flooding and pollution and should be employed where technically feasible and viable. They are built to manage surface runoff and may take different forms depending on the nature of the development and the area. They can include green roofs, filter strips and swales, infiltration devices and basins or ponds with some offering opportunities for environmental and landscaping enhancement improving biodiversity and local amenity. The LDF will promote SUDS through a Sustainable Design and Construction SPD, which will address issues of flood resilience and resistance along with SUDS adoption.

#### Policy Links

- Section 17 'Green Infrastructure'
- Section 18 'Sustainable Design and Construction'
- Section 22 'Infrastructure and Developer Contributions'