

- a. it meets the sequential and exception test (where required) as outlined in Government guidance;
- b. a site-specific flood risk assessment demonstrates that the development, including the access, will be safe without increasing flooding elsewhere, and where possible, will reduce flood risk overall;
- c. the scheme incorporates flood protection, flood resilience and resistance measures appropriate to the character and biodiversity of the area and the specific requirements of the site;
- d. appropriate flood warning and evacuation plans are in place; and
- e. new site drainage systems are designed taking account of events which exceed the normal design standard.

Development should not increase flooding elsewhere.

Sustainable Drainage Systems (SuDS) must be designed in accordance with policy DM6.

### Policy DM6, Sustainable surface water management and watercourse management

New development in areas at risk of flooding or development of more than 10 dwellings or employment facilities with a site area of 0.5 hectares or more that drain into a waterway within the Itchen or Hamble catchment or drain directly to coastal waters will only be permitted if they include Sustainable Urban Drainage systems

(SuDS). Within smaller developments mechanised systems will be considered.

In order to reduce flooding and maintain water quality (in accordance with DM8).

SuDS schemes should:

- i. manage surface water runoff as close to its source as possible and include at least three forms of naturalised filtration within the treatment train wherever feasible;
- ii. be designed in accordance with the CIRIA C697 SuDs Manual or equivalent national or local guidance;
- iii. ensure that discharge rates at least mirror greenfield rates before development;
- iv. where discharge is to a wetland or wet woodland habitat, flows off site must mirror the natural hydrological pathways;
- v. include clear arrangements for their whole life management and maintenance.

Where a watercourse is present on a development site, it should be retained or restored into a natural state and enhanced where possible. The culverting of any watercourse will not generally be permitted, and development should wherever possible remove any existing culverts and increase on-site flood storage. Development should be laid out to enable maintenance of the watercourse.

Where development drains into a waterway connected to the Natura



**2000 or Ramsar network a site specific Construction Environment plan must be prepared before construction.**

5.28 Eastleigh Borough is characterised by its internationally renowned rivers Itchen and Hamble and the associated coastal habitats along the upper reaches of the Hamble and Itchen Estuaries and Southampton Water. The River Itchen is designated as a Special Area of Conservation for its aquatic flora and associated fauna species under the E.U Habitats Directive and much of the River Hamble is designated as a Special Area of Conservation for its coastal habitats, and a Special Protection Area for its migratory and breeding bird populations under the E.U, Habitats Directive and the E.U Birds Directive respectively. The Hamble is also designated under the Ramsar convention for its wetland habitats and associated species. Because of these International and European designations Eastleigh Borough Council has a duty to ensure that there are no significant impacts on the Natura 2000 and Ramsar network as a result of any plans or projects including those determined within planning under the Article 6(3) of the Habitats Directive as transmuted into British law within the Conservation of Habitat and Species Regulations 2010.

5.29 Due to the extent of the rivers Eastleigh Borough is interlaced with a number of major tributaries and associated streams with the eastern part of the Borough flowing into the Hamble and the central and western areas flowing into the Itchen. Some of the creeks and gullies run directly into the designated coastal Solent Complex. The complexity of the network means that almost all of the major developments proposed are adjacent, or within close proximity, to a waterway within the network with surface water from the developments draining into either the Itchen or Hamble catchments. The Habitats

Regulations Assessment (HRA) prepared for the Local Plan has identified that there will be an in-combination impact on the water quality and flows within the Natura 2000 and Ramsar network in the Borough as a result of the proposed development and has recommended that this be mitigated at source within the site.

5.30 To ensure no pollution of the waterways during construction the HRA specified that a Construction Environment Management Strategy (CEMP) should be provided before construction commences detailing the safeguards in place to ensure the safe storage and use of fuels and chemicals and the design, management and maintenance of a separate construction drainage system with three forms of temporary filtration.

5.31 Temporary filtration could include straw bales, silt curtains and interceptors, bunds ditches, swales and filter drains, attenuation areas and settlement ponds and tanks and oil interceptors

5.32 To ensure no pollution within the operational phase the HRA recommends that a Sustainable Urban Drainage System be provided which either infiltrates directly into the ground at source or contains three forms of naturalised filtration to ensure water quality is treated before discharge; and that flows from the site should be maintained at greenfield levels. Naturalised filtration requires much less maintenance than mechanised filtration and so the mitigation can be assured during the life time of the development. However natural SuDS require more room and 10% of the site will need to be reserved for the SuDS.

5.33 Naturalised forms of filtration include, green roofs, vegetated swales, attenuation areas and basins, ponds, rain gardens and wetlands. Other more mechanised forms can be used to drain the urban area on the larger sites provided the three naturalised

forms are present at the end of the treatment train. In sites where sites are draining to natural wetland habitats or wet woodland before entering the river, the flows off site will need to mirror the natural hydrological pathways.

5.34 The policy is also designed to limit the impact of surface water flooding from new development. On previously developed (brownfield) sites the aim should be to reduce runoff rates and volumes. On greenfield sites the aim should be to ensure that there is no increase in the rate and volume of surface water runoff. Well-designed naturalised SuDS will have wider benefits for flood risk management, water quality protection, biodiversity, health, recreation and water resource management.

5.35 Surface water run-off should be managed as close to its source as possible, and as high up in the following hierarchy as reasonably practicable:

1. Into the ground (infiltration)
2. Into a surface water body
3. Into a surface water sewer, highway drain or other drainage system
4. Into a combined sewer

5.36 Development proposals should include an indicative drainage strategy to demonstrate how sustainable drainage will be incorporated into the development. This strategy should be proportionate to the site and the proposed development. The strategy should include sustainable drainage elements with attenuation, storage and treatment capacities incorporated as set out in the CRIA SuDs Manual C697, or equivalent and updated

local or national design guidance where available.

5.37 From April 2015, Local Planning Authorities have had the final decision about the suitability of SuDS provision on new development, while Hampshire County Council is a statutory consultee for major developments which have surface water implications. Proposals for sustainable drainage systems should include provisions for long term future maintenance of these systems, and developers should consult the Borough Council, Hampshire County Council and the Environment Agency as appropriate about such proposals.

5.38 The policy also addresses the situation where a watercourse is present on a development site. Such watercourses should not generally be culverted, as this can impede water flows and worsen flooding. In exceptional cases, where is no practicable alternative or the negative impacts are minor, applications to culvert a watercourse may be approved. Hampshire County Council, as Lead Local Flood Authority, consents works on ordinary watercourses and has adopted the principle that crossings of watercourses should be made using clear-Special Protection Area bridges in preference to culverts.

5.39 To avoid disputes over the maintenance of watercourses, to protect them from future interference and to ensure access is available for maintenance, the layout of major sites should be designed so that no gardens back on to the watercourse and there is no development within distance of at least 8 metres from the top of the bank. Wider buffer strips may be appropriate for larger watercourses. Such buffer strips should form part of the landscape framework for the site, and



arrangements should be made for their long-term management and maintenance.

## **Policy DM7, Flood defences, land reclamation and coast protection**

**Development proposals on the coast of Southampton Water, the River Hamble estuary and in other areas at risk of fluvial or surface water flooding should:**

- i. **not give rise to the need for additional flood risk management or coast protection works beyond those proposed in the approved management plans\*; and/ or**
- ii. **provide or contribute to the costs of works needed to protect the site as set out in the management plans\*; and**
- iii. **have regard to watercourse ownership and long-term management.**

**Flood defence and coast protection works will be permitted provided that they accord with the approved management plans\*.**

**Land reclamation will not be permitted unless it can be demonstrated that it will not:**

- a. **impede the movement of craft or otherwise compromise navigational safety on the coast or river; or**
- b. **disrupt existing recreational uses or areas where there is existing or proposed public access; or**

- c. **adversely affect the nature conservation, landscape or heritage value of the coast or river.**

**\*The approved management plans are:**

- **the North Solent Shoreline Management Plan<sup>41</sup>;**
- **the Environment Agency's Catchment Flood Management Plan<sup>42</sup> and;**
- **The Local Flood Risk Management Strategy<sup>43</sup> and the Eastleigh Borough Surface Water Management Plan<sup>44</sup>**

5.40

Parts of the Borough's coastline are subject to slow erosion, particularly along the shores of Southampton Water. For example, the low cliffs fronting Netley are retreating gradually. Lower lying areas around Hamble are also susceptible to inundation from the sea, which is likely to worsen with sea-level rise. The North Solent Shoreline Management Plan identifies the areas likely to be affected by both erosion and flooding over the years 2005-2105. The policy seeks to prevent development that would worsen these conditions, or give rise to a need for new flood defence or coast protection measures. This is due to the need to preserve the rare invertebrate communities that colonise the Netley cliffs.

Notes:

- i. Applications for dredging will be determined by the Marine Management Organisation and lie outside of the planning jurisdiction of the Borough Council.

41 <http://www.northsolentsmp.co.uk>

42 <http://www.environment-agency.gov.uk/research/planning/127387.aspx>

43 <http://www3.hants.gov.uk/flooding/floodriskstrategy.htm>

44 <http://www3.hants.gov.uk/flooding/surfacewatermanagement.htm>