

## Environmental Protection

### Policy CS34 Coastal Protection, Flood Risk, Sustainable Drainage & Natural Water Management

#### **Policy CS34A Coastal Defence and Erosion**

1. Proposals for new coastal protection and sea defence works in line with the adopted Shoreline Management Plan and Wirral Coastal Strategy will be only permitted where it is demonstrated that there will be no adverse effects on coastal processes or designated biodiversity or geodiversity assets.
2. Areas identified for specific protection for flood defence or coast protection are identified on the Local Plan Proposals Map
3. Development proposals within areas likely to be affected by coastal erosion will only be permitted where it can be demonstrated that erosion or landslip are not likely to occur during the lifetime of the development

#### **Policy CS34B Flood Risk**

4. Development must be located in areas at lowest risk of flooding from all sources, unless the Sequential Test and where appropriate the Exception test set out in national policy have been passed. Within the site, uses with the greater vulnerability to flooding must be located in areas with lower risk of flooding, unless it is demonstrated that there are overriding reasons why this should not take place.
5. Development proposals must not increase flood risk from any sources within the site or elsewhere, must not have adverse effects on ordinary water courses, tidal and fluvial defences; and where possible should reduce the causes and impacts of flooding.
6. In addition to national requirements, a site-specific Flood Risk Assessment is required for developments of less than 1 hectare in flood zone 1 where specific flood risks are present. Surface water flood risk must be afforded equal importance and consideration as fluvial and tidal flood risk.
7. Development proposals must incorporate an integrated approach to the management of flood risk, surface water and foul drainage.
8. Ground floor and basement access levels of all development should be at least a minimum of 600mm above:
  - (i) the 1 in 100 annual probability fluvial flood level; or
  - (ii) the 1 in 200 annual probability tidal flood level; or
  - (iii) a minimum of 300mm above the 1 in 100 annual probability surface water flood level,of whichever is the highest with an allowance for climate change, taking into account the presence of defences and the residual risks of failure of those defences?

### **Policy CS34C Sustainable Drainage Systems (SuDS) and Natural Flood Management**

9. Planning applications for major developments and other developments (where flood risk is likely to be an issue) must clearly demonstrate how sustainable drainage has been planned and evolved from the conception stage to manage surface water run off on the site in line with surface water drainage principles by integrating SuDS into the fabric of development using landscaped spaces and the construction profile of buildings having regard to technical guidance produced by the Local Lead Flood Authority; unless there is clear evidence that this would be inappropriate. Any communal components must be legally and physically accessible to those who will be served the system.
10. Where the SuDS system will not be adopted by the Water and Sewerage Company or other public body, proposals will need to show that suitable arrangements and legal heads of terms will be in place for the implementation, operation, maintenance, access to and management of sustainable drainage systems over the life time of the development.
11. Natural Flood Management techniques must be incorporated to aid with flood alleviation and implementation of suitable SuDS where appropriate.
12. SuDS design should be evolved through a master plan to mimic natural processes and enable full integration with neighbouring property without prejudicing comprehensive development of the area as an essential part of land use and development planning, and be considered in conjunction with other aspects of the design. Phasing of development must be carried out to avoid any cumulative impacts of flood risk and ensure that any sites at risk of causing flooding to other sites are developed first.
13. Surface water must be discharged in accordance with the following hierarchy:
  - Infiltration into the ground
  - Into a watercourse or surface water body
  - Into a surface water sewer
  - Into a combined sewer
14. Source control measures, such as rainwater harvesting and permeable paving must be incorporated to manage rainfall close to where it falls and treat frequent but smaller polluting events in accordance with Policy CS36.
15. SuDS schemes must be designed to manage surface water up to and including the 1 in 100 year six hour event and:
  - a) limit discharge rates and volumes to the greenfield equivalent for green field sites, and as close to greenfield rates and volume as reasonably practicable on brownfield sites; or
  - b) where it can be clearly demonstrated that it is not feasible to provide volume control through the provision of long term storage/infiltration, events up to the 1 in 100 year critical event must be attenuated and released at a rate no greater than the mean annual flood flow (Qbar) to manage downstream flood risk;
  - c) include allowances for climate change and urban creep and assume 100% runoff from impermeable areas;
  - d) prevent flows from accumulating at low spots (except where designed as temporary storage);

- e) ensure surface pathways are linked together in the same way as conventional drainage networks to safely convey exceedance flows off site; and
  - f) ensure that materials and components are fit for purpose and when reasonably maintained, retain their structural integrity over the design life of the development, which will be independently confirmed through a verification report by a qualified practitioner at the time of installation.
16. To derive the maximum benefit, priority must be given to the use of soft SuDS, or where this is clearly not practical utilising a combination of hard and soft components, taking full account of site opportunities and constraints.
17. The design of SuDS should have regard to the adoption standards of the Water & Sewage Company (or other adopting body) and ensure the system will operate as intended and manage flood risk for the lifetime of the development and that maintenance charges are economically proportionate.

Wirral is a low-lying peninsula, bounded by the River Mersey, the Irish Sea and the River Dee, with a comprehensive network of “ordinary watercourses”, many of which are culverted.

The main river catchments in the borough are the River Birket and the Dibbinsdale Brook and a sandstone ridge running from West Kirby to Heswall marks the watershed between the Mersey and Dee Estuaries, with much of the borough founded on sandstone that forms an aquifer.

Paragraphs 155 -162 of the NPPF cover directing development away from areas at risk of flooding considering cumulative impacts and taking a risk-based approach to development through application of the sequential and exception tests.

Sequential and exception tests may be required in flood zone 1 where development is proposed in locations identified as at risk of surface water flooding on Environment Agency flood risk maps or Wirral’s Strategic Flood Risk Assessment (SFRA)

Where the exception test is to be applied, consideration of wider sustainability benefits must include how the development would contribute to achieving the Broad Spatial Strategy in Policy CS2 and as per Wirral’s SFRA there must be a sequential approach to site allocation and site layout and no development within flood zone 3b unless in exceptional circumstances.

When assessing flood risk, surface water flood risk should be afforded equal standing in importance and consideration as fluvial and tidal flood risk, given the increase in rainfall intensities due to climate change and the increase in impermeable land use due to development. This includes possible withdrawal, redesign or relocation for sites at significant surface water risk

Wirral SFRA recommends that a site-specific Flood Risk Assessment is required where a site is:

1. within flood zone 1 and any part of the site is identified by the Risk of Surface Water Flooding Maps as being at risk of surface water flooding;
2. at risk of surface water flooding or on land which has been identified by the EA as having critical drainage problems;
3. situated in an area currently benefitting from defences;
4. situated over or within 8m of a culverted watercourse or where development will be required to control or influence the flow of any watercourse;

5. land identified as being at increased flood risk in the future;
6. at risk of flooding from other sources or at residual risk;
7. subject to a change of use to a higher vulnerability classification which may be subject to other sources of flooding.
8. within a council designated Critical Drainage Area; or
9. situated over a culverted watercourse or where development will require controlling the flow of any river or stream or the development could potentially change structures known to influence flood flow.

Furthermore, the SFRA recommends that planning permission for at-risk sites may only be granted where after consultation, the site-specific FRA demonstrates that the development will remain safe for its lifetime (with a suitable emergency plan) and has passed the exception test if required. The site-specific FRA must demonstrate no loss of floodplain storage, adverse effect on flood defences nor increase in off-site flood risk (taking into account climate change). SuDS need to be incorporated as appropriate and previously developed sites will achieve a discharge rate/volume as close to greenfield as reasonably practicable. The existing rate needs to be based on hydraulic assessment of the existing piped system and exclude overland flow.

Increased urbanisation impacts the water cycle and if not carefully managed can lead to increased risk of flooding. The SuDS approach to surface water management supports urban areas to better cope with severe rainfall both now and in future by slowing down and reducing the quantity of surface water runoff from a developed area to manage downstream flood risk and reduce the risk of that runoff causing pollution.

The National Planning Policy Framework (NPPF) requires SuDS to be multi-functional and by making water a visible and tangible part of the built environment SuDS can deliver and enhance the green space within developments and link to wider green networks, supporting the provision of habitats and places for wildlife and providing benefits to the community.

SuDS components can be “soft” (often referred to as “green or “landscaped”) or “hard” (often referred to as “grey” or “engineered”). To derive the maximum benefit from SuDS, priority must be given to soft SuDS or SUDS schemes utilising a combination of hard and soft components, fully taking into account site opportunities and constraints. SuDS should be used to achieve water quality improvements and amenity benefits as well as achieving compliance to the hydraulic criteria. Best practice in achieving water quality protection should be used.

SuDS can improve the quality of life in developments and urban spaces, making them more visually attractive, sustainable, resilient, improve air quality, regulate building temperatures, reduce noise and deliver recreation and education opportunities. High quality SuDS designs that are integrated into the overall design of the development can attract tourism and investment, driving economic growth for the local area

The main areas where SuDS can achieve benefits are water quantity, water quality, amenity, biodiversity and natural capital. Wirral SFRA recommends considering Natural Flood Management following consultation of the Council’s Green Infrastructure Strategy, national mapping and local investigation into suitability.

Paragraph 165 of the NPPF states that major developments should incorporate sustainable drainage systems unless there is clear evidence provided to the satisfaction of the LPA that this would be inappropriate.

The range of SuDS components and solutions available means that, with the timely engagement of the right expertise, effective SuDS schemes can be delivered for the overwhelming majority of developments including those challenged by high density, steep slopes, flat sites, high

groundwater, contaminated land, low infiltration capacity and unstable soils. Cost should not be a barrier, as where SuDS are designed to make efficient use of the space available, they can often cost less to implement than underground piped systems .

Source control components should be included on all new developments, managing rainfall close to where it falls to handle and treat some of the more frequent but smaller polluting events (at least 5mm), known as “interception storage”. Rainwater harvesting (water butts) and permeable paving (where paved areas are proposed) should be integrated into the design of new developments.

Wirral’s SFRA recommends all SuDS must be designed to meet industry standards as specified below, including any replacement standards/documents:

- Technical Standards for Sustainable Drainage Systems (Defra)
- C753 The SuDS Manual
- Sewers for Adoption 8

Application of industry standards should give due regard to Wirral’s local SuDS Design and Evaluation Guide and submission requirements.

Using a phased approach to development is recommended in the SFRA to ensure that any sites at risk of causing flooding to other sites are developed first ensuring that flood storage measures are in place and operational before other sites are developed, thus contributing to a sustainable approach to site development during all phases of construction. It may be possible that flood mitigation measures put in place at sites upstream could alleviate flooding at downstream or nearby sites.

Development phasing within large strategic sites of multiple developments should also be considered where parts of such sites are at flood risk.

### **Policy CS36 - Pollution and Risk**

Development proposals likely to give rise to pollution to soil, air or water or from insects, noise or artificial light or increase the risk of accident hazard will not be permitted unless it can be demonstrated that:

- all practical measures have been taken to minimise potential risk and harm to human health and safety, property and the built and natural environment;
- all practical measures have been taken to minimise pollution levels and mitigate the impacts of the pollution, including exposure to air pollution; and
- the residual risk or harm to human health and the environment will be acceptable and will not cause unacceptable harm to the general amenity of neighbouring uses and the character of the area, either individually or cumulatively, or prejudice the delivery of the Broad Spatial Strategy in Policy CS2.

Development proposals that will result in an unacceptable increase in the risk to human health and the environment, impose significant restrictions on the continued operation of existing licenced or controlled processes, or that would lead to an existing use being classified as a statutory nuisance or designation of an Air Quality Management Area will not be permitted.

A number of industrial installations and processes in the Borough are controlled through other regulatory mechanisms to ensure that pollution and the risk of accidents are managed. While no Air Quality Management Zones have been identified with the Borough, it is a priority for the Authority to monitor air quality and as part of the wider strategy to introduce sustainable ways of traveling, walking and cycling etc. to ensure the concentrations are within the EU objectives.

Policy CS36, in line with national policy, is intended to complement these statutory processes to minimise the effects of development on public health and the local and natural environment. Practical measures to minimise the potential risk and harm will need to be considered at in conceptual stages of the design including the location and layout of the proposed scheme to ensure there are no unacceptable impacts throughout the construction stages and ongoing use over the lifetime of the development.

Development will not automatically be acceptable in planning terms simply because it meets statutory requirements under pollution control regimes or hazardous substance consents and proposals will need to incorporate measures that contribute to achieving sustainable development in line with Policy CS1A and Policy CS1B.

Legislation requires the maintenance of appropriate safety distances between hazardous installations and pipelines and residential areas, buildings and areas of public use, major transport routes and areas of particular natural sensitivity or interest. There is also a need to prevent the introduction of sensitive uses from constraining the continued operation of existing industrial uses. Consultation will, therefore, be undertaken with the Health and Safety Executive and/or the Environment Agency before development within notified consultation zones can be permitted.

The Water Cycle Study has highlighted that water supply is dependent on groundwater abstraction. As it is important to continue to protect areas that recharge groundwater through suitable management of surface activities, the agreement of the Environment Agency will, therefore, also be required before development over or close to Source Protection Zones or around abstraction boreholes and/or infiltration drainage systems, can be permitted. The Water Framework Directive Regulations also requires the prevention of deterioration of water quality in water bodies, with the aim of achieving Good Ecological Status.

Mitigation measures to reduce the potential impact of pollution or accident risk will normally be secured through controls over design and layout and/or legal agreement before permission will be granted.

### **Policy CS37 - Contamination and Instability**

Development proposals likely to affect land known or suspected to be unstable or contaminated, including by invasive species, must be supported by an appropriate contamination and (or) ground stability assessments that identifies;

- the nature, level and extent of contamination or instability;
- the implications of contamination or instability for the development of the site and risk to human health, the natural environment, buildings and other property, including water bodies and water courses;
- a viable method of remediation which will safeguard users or occupiers of the proposed development, neighbouring land uses and the environment from significant risk, and will make the land suitable for the use proposed. Planning conditions or a legal agreement will be used where appropriate, to secure a proportionate site investigation and to secure and implement a suitable remediation strategy prior to development or as part of an agreed, phased programme.

Development proposals within areas likely to be affected by coastal erosion will only be permitted where it can be demonstrated that erosion or landslip are not likely to occur during the lifetime of the development.

The Borough's industrial heritage, including previous chemical processes and land reclamation, has resulted in a number of potentially contaminated sites. The development of contaminated sites without proper treatment can cause harm to public health and the natural environment, particularly for more sensitive uses such as a day nursery or housing. It is important that all opportunities are taken to identify and address contamination, which also includes the presence of invasive species through the development process and enable the reuse of previously developed land which can make a major contribution to urban regeneration.

Policy CS37 therefore seeks to promote the sustainable and beneficial use of land to ensure that proper account is taken of any likely environmental risks both now and in the future. To achieve this, proposals for the development of sites known or suspected to be contaminated must at least include a desk-based site investigation report, prepared by a competent person, identifying the previous uses of the site, the likely nature of any contamination and any potential significant risk. Where necessary, a suitable method of remediation must be identified, that as a minimum would result in the land not being determined as contaminated land under Part IIA of the Environmental Protection Act 1990.

### **Policy CS39 - Waste Management**

New waste management development will be permitted in accordance with the spatial strategy, policy criteria and site allocations for new waste management development set out in the Joint Waste Local Plan for Merseyside and Halton adopted in July 2013.

All new development will be required to ensure that safe and adequate on-site provision is made for the storage, collection, recycling and management of waste and litter likely to be generated by the development.

Proposals that would support improvements in the minimisation, collection, re-use and recycling of waste generated at existing facilities within the site will normally be supported subject to Policy CS1A.

National policy seeks to promote sustainable waste management in accordance with a hierarchy which will encourage waste prevention and minimisation, re-use and recycling before treatment and disposal and to minimise landfill to meet European commitments.

The spatial strategy, criteria for development management and site allocations for new waste management development in Wirral, based on a resource recovery-led strategy and a sub-regional site approach, is set out in a separate, jointly prepared sub-regional Waste Local Plan for Merseyside and Halton.

The Joint Waste Local Plan identifies three additional sites for new waste management facilities; at Cammell Lairds in Tranmere and at Bidston adjacent to the existing recycling facilities at Wallasey Bridge Road; and areas of search for smaller scale facilities at Poulton and Tranmere, which reflect the scale and pattern of development anticipated in this Proposed Local Plan.

The delivery of the Joint Waste Local Plan strategy relies upon improved facilities for the minimisation, collection, re-use and recycling of waste on the site where the waste is generated, as an integral part of new development or through improvements to the facilities available at existing sites. Other off-site facilities for new waste management development will normally be expected to be provided in industrial locations away from residential property and other environmentally sensitive land uses, with good access to the Strategic Route Network or water access (wharfage) to encourage transport by water.

Additional guidance on the space that will be necessary to set aside to allow safe access for the on-site storage, collection and emptying of containers and on the control of litter is included in relevant Supplementary Planning Documents.

DRAFT