



Infrastructure Services
Shetland Islands Council

INDICATIVE GUIDANCE FOR FLOOD RISK ASSESSMENT

Advice Note 4

This guidance contains minimum information requirements for Flood Risk Assessment in simple situations.

Shetland Islands Council
Infrastructure Services
Planning
Grantfield
Lerwick

Listed below are the minimum information requirements for Flood Risk Assessment in simple situations, it should be noted that **further information may be required depending upon site-specific circumstances.**

Should the information prove to be insufficient SEPA may advise that a detailed Flood Risk Assessment be commissioned following guidelines as set out within Annex B of SEPA Policy 41: “A SEPA-Planning Authority Protocol, Development at Risk of Flooding: Advice and Consultation”¹.

A. Single Dwelling House Site:

- a) Six-figure National Grid Reference²;
- b) Site location plan at a scale of 1:2500 showing contours and a clearly distinguishable line demarcating the site in question. The plan must also highlight all watercourses within the catchment area or other bodies of water in the vicinity that may have an influence on the site;
- c) Site layout plan showing ground level in relation to a specified Datum³ both pre and post development;
- d) Proposed finished floor level in relation to a specified Datum³;
- e) Provide details and specifications of any pre-existing flood alleviation measures, their state of maintenance and their performance;
- f) If applicable, lowest level of access road in relation to a specified Datum³ to ensure that safe dry access and egress can be provided⁴;
- g) If available, any anecdotal or photographic information on historic flood events;

B. More than one Dwelling House & Commercial/Industrial Development:

As above but:

- h) Detailed topographical site plan showing ground levels over the area of the site in relation to a specified Datum³ along with the positioning of all buildings within the site.

All proposed development lying within fluvial flood risk areas, or within areas affected by a combination of both fluvial and coastal flooding, will be required to submit a detailed Flood Risk Assessment⁵ covering the points in 1.a) to g) plus:

- i) The estimated peak flood level (fluvial, coastal, or a combination of both whichever produces the worst case scenario) that reflects the 1 in 200 year return period event
- j) The mapped extent of this event in relation to the sites, with the development layout superimposed;

k) Outline, if applicable, of the proposed works required to mitigate flood risk and also show that these works will have a neutral (or better) effect on the probability of flooding elsewhere, including existing properties;

C. Flooding From All Other Sources

Flooding from sources other than Fluvial and Coastal ⁶ should be addressed through a Drainage Strategy ⁷;

Guidance Notes:

1 This document can be downloaded from the SEPA website flooding page http://www.sepa.org.uk/flooding/flood_risk.aspx Annex B provides guidance on generic requirements for undertaking a Flood Risk Assessment. An updated set of guidance (entitled “Technical Flood Risk Guidance for Stakeholders”) has recently been completed to complement Annex B and is also available from the SEPA website http://www.sepa.org.uk/flooding/flood_risk.aspx Please note that Policy 41 is currently under review and that the final draft of this document will be ready for consultation purposes in due course.

2 A National Grid Reference in the alphanumeric format. (for example HU 464 427 for Lerwick Power Station). A grid reference finder is available from <http://www.ordnancesurvey.co.uk/oswebsite/>

3 It is acceptable to provide levels referenced to – Ordnance Datum (Local Lerwick), Chart Datum (Lerwick) or Ordnance Datum (Newlyn). The type of Datum used must be marked clearly on every drawing submitted. For the Shetland Islands the local datum is at OSBM Bolt, Lerwick (National Grid Reference: HU4783 4129) for further information please refer to the Ordnance Survey website at: <http://benchmarks.ordnancesurvey.co.uk/pls/htmlldb/f?p=111:6:4304381336192825022::NO:6::>

4 SPP7 requires Developers and Planning Authorities to take into account the effects of a flood on access, including by Emergency Services. Whilst SEPA is not the competent authority to advise on emergency evacuation procedures SEPA believes that if safe access cannot be provided then the consequences of a flood event cannot be acceptably managed. SEPA may therefore object to residential or other flood sensitive development where a dry, unobstructed escape route, which would remain free from flooding from a 1 in 200 year flood event, cannot be identified by the developer. Please note that a pedestrian route is currently acceptable to SEPA. Dry access should preferably be provided to land wholly outside the area at risk from flooding. However, it is recognised that ‘dry islands’ of land above the flood water level, but surrounded by floodwater,

exist in the Shetland Isles. In these circumstances, SEPA considers that the developer must demonstrate that use of such a 'dry island' is sustainable (e.g. that a 'dry island' could support the number of people likely to rely on its use during a flood by housing them, having adequate food supplies, and providing essential services).

5 The detail and technical complexity of a Flood Risk Assessment will reflect the scale and potential impact of the development proposal but, in all cases, whenever a Flood Risk Assessment is undertaken for any location, the resulting report should address or comply with the requirements of Annex B of SEPA Policy 41 as well as the updated set of guidance (please refer to point (1)).

6 Definitions of Fluvial, Coastal and Pluvial Flooding:

Fluvial: Flooding originating from a watercourse (e.g. major river, small burn), either natural or culverted.

Coastal: Flooding originating from the sea (open coast or estuary) where water levels exceed the normal tidal range and flood into the low-lying areas that define the coast line.

Pluvial: Urban or rural flooding caused by rainfall, of varying intensities and durations where the local topography and/or underlying ground conditions combine to inhibit the free drainage of rainfall.

7 Please refer to Section 15 of Scottish Planning Policy 7 – Planning and Flooding (SPP7)

Further Information

N.B This document is for guidance only, if you wish to discuss any development or require further information please contact the Planning Control Department and speak to the Duty Planning Officer on (01595) 744800.