Flood Risk Assessment User Guide: Householder Extensions in Flood Zone 2 and Areas of Medium to High Surface Water Flooding

This User Guide has been produced to assist applicants in preparing a Flood Risk Assessment (FRA) in support of householder extensions in Flood Zone 2 or household applications in areas of medium to high surface water flood risk. It aims to clarify the requirements of Core Strategy CS26 (Flooding) (2011) and the Flood Risk Supplementary Planning Document (SPD) (May 2016). These documents can be found at: www.elmbridge.gov.uk/planning/sdps/flood-risk/

Why is a FRA required?

National guidance advises that minor developments are unlikely to raise significant flood risk unless specific issues arise as defined in paragraph 47 of the Planning Practice Guidance (PPG) produced by Government. Elmbridge Strategic Flood Risk Assessment (SFRA) published May 2015 advises that in significant parts of the Borough there is potential for minor development to be considered to be having a cumulative impact on flood risk in the local area as a result of impact on flood storage capacity and flood flows. Therefore, it is appropriate to take a precautionary approach to all development within areas identified as being at risk of flooding.

Why can’t I just hand in an ‘EA standard table’?

The Environment Agency is not responsible for assessing the implications for ‘minor’ development, this responsibility lies with the Council.

The Council needs to have the necessary information to effectively assess the impact of the development and make a judgment that the proposed mitigation measures are sufficient. The EA table does not provide the sufficient detail to address the flood risk concerns that are affecting Elmbridge and the Council has provided a specific Flood Risk SPD because of the risk of flooding in Borough.

The Council is responsible for ensuring that the cumulative impact of these small scale developments is reduced as over time this could have significant implications for flood storage and flow routing within the Borough and could result in human risk.

What should my FRA contain?

1. **Identify the risk** of flooding from all sources (taking into account climate change).
2. **Consider the implications** of the extension(s) on flood waters.
3. Confirm the mitigation measures to manage this impact.
4. Confirm the resistance and resilience measures to be incorporated into the design of the extension to minimise the impact if a flood occurs.
5. Provide a Personal Flood Plan detailing what action owners/occupiers would take in the event of a flood and the route they would take when leaving their home in a flood event.
6. Confirm the Sustainable Drainage (SuDS) techniques to manage any increase in surface water runoff caused by the extension. If your site is only in an area of medium to high surface water flood risk the FRA just needs to complete step 6.

**Important Notice:**

If a FRA fails to provide sufficient detail in line with this guide, this may result in the refusal of the application. Once an application is submitted there will be no opportunity for further information to be provided during the determination of an application.

The completion of a FRA will not automatically mean that the development is acceptable in flood risk terms.
1. Identify Risk

- Check the type of risk effecting the site using the Council's SFRA mapping: www.elmbridge.gov.uk/planning/sdps/flood-risk/sfra/
- Use Product 4 (Detailed Flood Risk Assessment Map) available from the Environment Agency. It provides a detailed Flood Risk Assessment Map, including flood zones, defences and storage areas, areas benefiting from defences, statutory main river designations, historic flood event outlines and more detailed information from the EA computer river models (including model extent, information on one or more specific points, flood levels, flood flows).
- Summarise the flood risk.

2. Implications of the extension

- Acknowledge that all new structures will impact on where flood water will go, this could include the dispersing of flood water flows beyond the site boundaries.
- The greater the size of the extension the greater the impact on flood flows.
- Confirm the existing ground surface that the extension will be built on (e.g. non-permeable patio, tarmac or garden etc).
- There is no requirement for site specific modelling.

3. Mitigation Measures

- Confirm the measures that will be incorporated to address the implications of the flow routings and dispersal of flood water. These need to be included in the proposed plans.
- Refer to page 46 of the SPD for examples of opportunities to make space for water which need to be considered. Measures such as infiltration strips will absorb some of the water and slow flows down in a flood event.

4. Resistance & Reilience Measures

- Confirm flood protection devices and measures that are to be incorporated to keep water out and give occupants time to relocate ground floor contents. This must include the finish floor levels which should be no lower than the existing level in the house.
- In areas where flood depths are greater than 0.6m confirm measures that will be incorporated to allow water in but limit damage to allow for rapid re-occupancy.
- Refer to page 42 of the SPD for examples of resistence and resilence measures that could be incorporated.

5. Personal Flood Plan

- Detail the steps occupants would take such as signing up to the EA early warning system and in a flood event turn off electricity and put out sandbags.
- Provide a simple map showing how the occupants can reach a safer locality in a flood event.
- A personal flood plan template produced by the Government can be found at: www.gov.uk/government/publications/personal-flood-plan

6. Managing Surface Water Runoff

- Confirm and provide details of the proposed Sustainable Drainage (SuDS) techniques(s) that will be used to manage the surface water runoff that will result from the extension(s).
- Refer to pages 49-51 of the SPD for further details and examples of SuDS techniques. Common examples for household schemes include waterbutts and soakaways.

**Importance Notice:**

All measures need to be clear within the FRA and associated plans. Recommendations are not sufficient.