

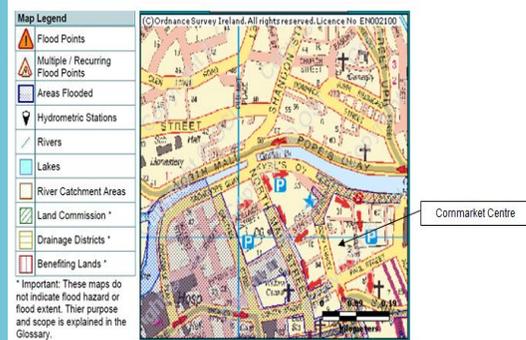
Licensed Discount Foodstore Flood Risk Assessment

Contract Brief

JBA Consulting were commissioned to undertake a flood risk assessment for a proposed licensed discount foodstore, to be located in the Cornmarket Centre, Cork.

The development had been granted planning permission, subject to a number of conditions, including the FRA.

Figure 2-1 - OPW FloodMaps.ie Summary Map



Objectives

- To respond to the specific requirements of the planning condition, which focused on emergency planning in the event of a flood.
- To meet the requirements of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (OPW/DoEHLG, 2009).
- As the development was classed as a change of use, the proposal was assessed under Section 5.28 of the Planning Guidelines, "minor proposals in areas of flood risk".
- The aim of this FRA was to provide a 'commensurate assessment of the risks of flooding, to demonstrate that the development would not have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities' at the site, as required by the Planning Guidelines.

Outcomes

- A review of historical flood event records shows that although Cork City is vulnerable to flooding, with major events occurring in 2004 and 2009, the Cornmarket Centre has not been reported to flood.
- Flood risk, as presented in the Lee CFRAM¹, has been examined. The model results indicate the store is within the fluvial and tidal extreme flood outlines (1% AEP fluvial event and 0.5% AEP tidal event). However, the level of risk surrounding the centre is low, with shallow depths (under 0.5m in a 0.1% AEP event), low velocities and consequent low hazards reported in the CFRAM. Climate change impacts, although assessed, are moderated by the relatively short design life of the development.



- One of the key impacts of a flood event will be inundation of the ground floor, with water running through the building and down to the basement. With careful management, these risks can be minimised through effective and timely flood warning and response.
- Options for flood resilience and resistance have been reviewed, but the constraints of the existing building, and the standard design and operation systems of the client mean there are few opportunities for such measures to be incorporated.
- The recommended approach to flood management is to establish a flood emergency plan, which must trigger the evacuation of the basement when a flood warning is received; this builds on the established responses within the management plan of the Cornmarket Centre.
- The proposal was approved by the Local Authority in mid 2013.

¹ More information is available on <http://www.leecframs.ie/>

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