Electricity Generation Station, Co Louth
Flood Risk Assessment

Contract Brief

JBA Consulting was appointed, to prepare a Flood Risk Assessment (FRA) for a landholding in Toomes, Co. Louth. The report was prepared in response to a Further Information Request (FIR) from Louth County Council as part of an Extension of Duration Planning Submission. The development was previously granted planning permission under application, but it was the concern of Louth County Council that a portion of the proposed site is vulnerable to Pluvial Flooding, as identified in the OPW Preliminary Flood Risk Assessment Flood Maps

Objectives

- To meet the requirements of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (OPW/DoEHLG, 2009)
- To examine existing flood mapping and prepare new mapping, specifically dealing with pluvial flood risk at the site.
- To demonstrate that the proposed development is not at risk of flooding nor will exacerbate flooding in the immediate vicinity or wider area.
- To verify that the proposed flood risk mitigation measures, as submitted as part of the original planning application, are appropriate in their management of pluvial flooding.

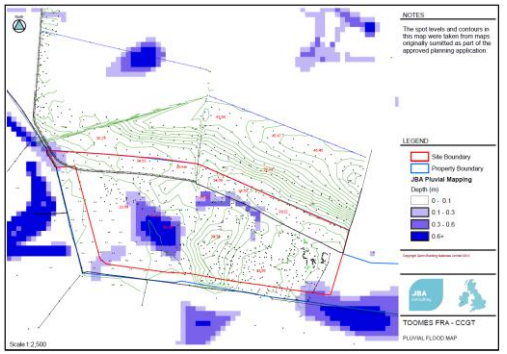
Services provided

A review of the flood history of the site and surrounding lands was undertaken. This included consultation with the Local Authority to establish their expectations of the assessment and its outcomes.

The background to the PFRA mapping was reviewed, and shortcomings in its approach identified.

JBA than devised an alternative methodology to examine pluvial flood risk to the site, which involved remodelling a number of design rainfall events. Improvements over the PFRA mapping were obtained through:

- Improved representation of rainfall across the site
- Use of a higher resolution digital terrain model to better represent flows on and around the site.
- Specific focus on the development area, rather than relying on the national PFRA screening maps.



Based on the outputs of the flood mapping, the design, as it stands in the current application was reviewed. The proposed approach to surface water management, using SUDS, and the finished floor levels, were considered appropriate.

Outcomes

The proposed development was not considered to be adversely affected by flooding, nor will it exacerbate the risk to the immediate vicinity or wider surrounding areas. The proposal is considered to be in accordance with the Planning Guidelines, and includes measures to manage surface water management according to sustainable drainage principles.

The application for extension to time was granted by the local authority in early 2013.

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