



Dublin City Council  
Comhairle Cathrach Bhaile Átha Cliath

Strategic Planning & Project Management Divisions,  
Flood Defence Unit,  
Dublin City Council,  
Room 409, 68/70, Marrowbone Lane,  
Dublin 8.  
2<sup>nd</sup> November 2010.

Residents of Cabra West,

**Re: Proposed Flood Alleviation Swales.**

Dear Resident,

Following the extreme flood event of 9<sup>th</sup> August 2008, Dublin City Council has put a lot of effort into analysing the flooded areas and proposing solutions to reduce the possibility of future flooding. Some work has already been carried out in your area and it is proposed to install two swales (green area hollows) to further reduce the possibility of flooding.

Please find attached two 3D drawings showing the proposed swales in the green area of Killala Road & Drumcliffe Road.

***Killala Road Details***

This swale is proposed to have a volume of 2200m<sup>3</sup> with a depth of approximately 1.0m. The Parks Department have requested that the side's slopes be at a slight 1 in 5 gradient to facilitate grass cutting.

***Drumcliffe Road Details***

This swale is proposed to have a volume of 950m<sup>3</sup> with a depth of 1.0m. The Parks Department have again requested that the side's slopes be at a slight 1 in 5 gradient to facilitate grass cutting.

The swales are designed to prevent residential flooding up to the 100-year pluvial event (i.e. an event which is estimated to occur on average only once every century, but could happen at any time). When the local underground surface water drainage pipes surcharge, approximately once every 10 years, the surplus water will go into these proposed swales by way of the new underground pipes. After the storm abates the water finds its way back into the drainage system by way a new outlet pipe back into the sewer network. The swales will normally be relatively dry as per any green area.

The swales would only fill up in a 100-year, or worse, event. Lesser events would only partially fill them up and it would take a 10 year storm event to put any significant rainwater in them at all. In the 100 year event the swales should drain down within a few hours. The ground in which the proposed swales are to be constructed is impermeable as shown by drainage excavations and tree conditions around it. The new swales would be covered with topsoil and grassed as per existing green area. An example of a large swale is attached, it is nothing more than a depressed green area

P.T.O.

Dublin City Council intends applying for planning permission for these two swales through the Part 8 procedure, which gives the public and certain statutory organisations an opportunity to comment. However as these proposed defences are adjacent to the residence of Cabra West's property, your views are the most important to us in this procedure. Could you, after consultation with any other residents in your house please send any comments to the above address by 12<sup>th</sup> November 2010?

The construction of these swales would incur significant costs on Dublin City Council in these recessionary times. Currently the funding appears to be available however this may not be the case when it comes to the construction phase of this project.

Regarding health and safety, these swales will only start to fill up during a very heavy rainfall event estimated at 20mm or more of rainfall in one hour, occurring on average once every 10 years. They will take at least 30 minutes to fill up to a maximum level of around 1.0m in an extreme event. All children should be warned to stay away from them in extremely heavy rainfall conditions. The banks will be of a sufficiently gentle slope to allow easy egress, however a gentler egress.

Yours Sincerely,

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**Gerard O'Connell,**

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**Sandyford, Co.Dublin.**

Example of large swale/retention pond.

