

Bedford, Katie

From: [REDACTED]
Sent: Friday 25 November 2022 15:09
To: Forward Planning
Subject: [EXTERNAL]Observations on Draft Caherconlish Local Area Plan 2023 - 2029
Attachments: Observations on Draft Caherconlish Local Area Plan 2023 - 2029.pdf

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Dear Sir/Madam,

Please find attached the OPW Flood Risk Management Observations on Draft Caherconlish Local Area Plan 2023 - 2029

Kind Regards,

Please note that this address is only to be used in relation to spatial planning matters and development plans. Kindly please refrain from disseminating this email address to the public. Private individuals and businesses should be directed to send their comments and questions in relation to flood management to floodinfo@opw.ie

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**Forward Planning,
Economic Development and Enterprise Directorate,
Limerick City and County Council,
Merchants Quay,
Limerick**

25/11/2022

RE: Draft Caherconlish Local Area Plan 2023 - 2029

Dear Sir/Madam,

The Office of Public Works (OPW), as lead agency for flood risk management in Ireland, welcomes the opportunity to comment on the Draft Caherconlish Local Area Plan 2023 - 2029.

This submission is made specifically concerning flood risk management. Further submissions on the Issues Paper may be made by the OPW concerning the estate portfolio, heritage and other areas of responsibility.

The OPW welcomes the acknowledgement of the Guidelines and the preparation of a Strategic Flood Risk Assessment (SFRA). In particular, the OPW welcomes:

- The commitment to managing flood risk in line with the Guidelines, objectives IU O4 (a)
- Objectives IU O3 (c) and (d) in relation to requiring all new developments to include SuDS and to investigate the potential for the provision of porous surfaces where hard landscaping is proposed
- Objective IU O5 to promote blue green infrastructure as a means of managing flood risk and enhancing the natural environment
- Objective IU O6, that proposed developments provide an appropriate set back from the edge of watercourses to ensure access infinity for channel clearing, and/or maintenance.

The following comments highlight opportunities for the Draft Plan before it is finalised.

Flood Risk Management (FRM) – General Guidance

The Guidelines set out a three-stage Flood Risk Assessment process for the Planning Authorities to identify whether flood risk may exist and the degree to which it is an issue

and then what assessment to a scale proportionate to the risk should then be carried out. The following is an overview of this three-stage process;

Stage 1 Flood risk identification – To identify whether there may be any flooding or surface water management issues related to a plan area or proposed development site that may warrant further investigation.

Stage 2 Initial flood risk assessment – To confirm sources of flooding that may affect a plan area or proposed development site, to appraise the adequacy of existing information and to scope the extent of the risk of flooding which may involve preparing indicative Flood Zone maps. Where hydraulic models exist the potential impact of a development on flooding elsewhere and of the scope of possible mitigation measures can be assessed. In addition, the requirements of the detailed assessment should be scoped.

Stage 3 Detailed flood risk assessment – To assess flood risk issues in sufficient detail to prepare Flood Zone maps based on a quantitative appraisal of potential flood risks to a proposed or existing development or land to be zoned, and to identify potential impacts on flood risk elsewhere and of the effectiveness of any proposed mitigation measures.

The Strategic Flood Risk Assessment (SFRA) provided for the Caherconlish LAP is stated as being a Stage 1 Flood Risk Assessment. Table A3 in the Technical Appendices of the Guidelines (see below) states that at a minimum a Stage 2 Initial flood risk assessment is recommended for this type of plan (town within a county plan). As potential flood risk issues have been identified, a more detailed assessment would then be recommended i.e. Stage 3 Detailed flood risk assessment. It appears that there are few datasets available for Caherconlish and that indicative mapping has been used in the formation of the Flood Zones Maps.

	Flood risk identification	Initial flood risk assessment	Detailed flood risk assessment
Regional Flood Risk Appraisal	✓	U	U
Strategic Flood Risk assessment – County-wide	✓	P	U
Strategic Flood Risk Assessment – City or town within a county plan	✓	✓	P
Site-specific flood risk assessment	✓	✓	✓

P = Probably needed to meet the requirements of the Justification Test
 U = Unlikely to be needed
 ✓ = Required to be undertaken

Table A3. Flood risk assessment stages required per scale of study undertaken

The OPW recommends that this SFRA is a Stage 3 Detailed Flood Risk Assessment. Flood modelling should be undertaken to accurately assess the potential flood risk to the town, how the risk can be managed, and to inform planning decisions.

Flooding from Other Sources

Flood hazard and potential flood risk from all sources should be identified and considered at the earliest stage in the planning process. The flood zones are determined on the basis of the probability of river and coastal flooding only and any pluvial, groundwater or other flooding identified should be separate from the flood zone mapping.

The OPW do not intended to update the PFRA indicative pluvial maps, as it is not appropriate to map flooding from this source through a national-scale assessment, and maps would be more robust if produced at the community / local scale. Therefore, Limerick City & County Council may consider producing pluvial maps for inclusion in the Plan.

Flood Zone Map

It is unclear what data has been used to produce the flood zone mapping. Limerick City & County should clarify the data source that has been used. It is noted that the Flood Map has been verified by the consultant, however it is not stated how this has been achieved. Predictive mapping produced from modelling the flood risk would provide a more accurate representation and better inform land use zonings and support planning decisions.

Flood Risk Identification

The SFRA uses the information sources, provided in the Appendices of the Guidelines, as heading for the sections, this table should only be used as an indication for information sources, as some of these sources are or could be superseded.

The new guidance from OPW is that PFRA mapping is now superseded by the outputs of national indicative flood mapping; National Indicative Fluvial Mapping (NIFM), National Coastal Flood Hazard Mapping (NCFHM) and probabilistic and historic groundwater flood maps prepared by Geological Survey Ireland through the 2016-2019 GWflood Project.

Section 3 of the SFRA *Predictive and historic flood maps and benefiting land maps* appears to be using an image from an old OPW website. Please note that this website is no longer active and this information can be accessed on the OPW's portal www.floodinfo.ie. Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas. The OPW requests that Limerick City & County Council has regard in zoning land for development to ensure that access requirements are preserved for the maintenance of Arterial Drainage Schemes and Drainage Districts.

Section 8 *Advice from Office of Public Works* states "This will be sought as the review progresses". Limerick City & County Council can contact the OPW (floodplanning@opw.ie) in relation to this Draft Plan and the application of the Guidelines.

The discussion for Section 10 *Topographical maps – in particular LIDAR* is included under Section 11, and Section 11 *Information on flood defence condition and performance* is included under Section 10 of the SFRA.

Justification Tests Supplied

Justification Tests supplied in the SFRA are welcomed by the OPW.

There are three criteria of a Justification Test, which all must be satisfied, with the third criteria being the flood risk assessment. This flood risk assessment must demonstrate that flood risk can be adequately managed and the use or development of the lands will not cause unacceptable impacts elsewhere. The planning authority should specify the structural or non-structural measures as prerequisites to development and provide information on the residual risks that would remain and how they might be managed.

For zonings/sites that are already developed then the Department of Environment, Community and Local Government Circular PL 2/2014 provides further advice and detail to planning authorities on older developed areas of towns and cities located in Flood Zone A and B. Section 4.27a, '*Existing, developed, zoned areas at risk of flooding*', to the Guidelines states that, "*In these instances, where the residential / vulnerable use zoning has been considered as part of development plan preparation, including use of the Justification Test as appropriate, and it is considered that the existing use zoning is still appropriate, the development plan must specify the nature and design of structural or non-structural flood risk management measures required prior to future development in such areas in order to ensure that flood hazard and risk to the area and to other adjoining locations will not be increased or, if practicable, will be reduced. Planning authorities should consider the issues and opportunities raised in section 4 of Appendix B (Technical Appendices) in this regard, and may consider including certain objectives or conditions as part of the zoning*".

Village Centre and Existing Residential

The OPW recommends that these two zonings be assessed individually against the criteria of the Plan Making Justification Test, to clearly demonstrate that a review of all three criteria has been carried for each of the zonings.

A site specific FRA is not considered in itself to be a mitigation measure, and Limerick City & County Council might consider providing further guidance on the measures considered acceptable in the area. It should also be noted that the Justification Test is comprised of two processes, a Plan-making Justification Test and a Development Management Justification Test. Applicants will be required to satisfy all criteria of the Development Management Justification Test as well as supplying a SSFRA.

The *Existing Residential* zoning is to be limited to minor developments and references Section 5.28 of the Guidelines in criteria 3. Limerick City & County Council should note that revisions to this section of the Guidelines are contained in Circular PL 2/2014. Limerick City & County Council should include this restriction to *Existing Residential* in the Justification Test conclusion.

Limerick City & County Council also should consider referencing objective IU O4 (c) *“Ensure that future developments in flood prone areas are generally limited to minor developments in line with the Circular PL 2/2014 and the Flood Risk Management Guidelines for Planning Authorities”* and objective IU O4 (d) *“Demonstrate that future development will not result in increased risk of flooding elsewhere, restrict flow paths, where compensatory storage/storm water retention measures shall be provided on site”*.

Agriculture

As the Justification Test correctly concludes this zoning does not satisfy criteria 2 and Limerick City & County have restricted the lands to water compatible uses. It is stated in the test that *“limited development will be considered subject to an appropriate level of assessment”*. Land and buildings used for agriculture is considered a less vulnerable development type in the Guidelines, therefore an *Agriculture* zoning in Flood Zone A would be considered inappropriate. The OPW recommends rezoning as water compatible or include an objective to support the restricting of development to water compatible uses.

Consideration of Climate Change

There is no discussion on climate change in relation to flood risk management. The OPW recommend that the Draft Plan addresses how climate change has been considered in the production of this development plan. The potential impacts of climate change include increased rainfall intensities, increased fluvial flood flows and rising sea levels. In line with the Guidelines, while Flood Zones are defined on the basis of current flood risk, planning authorities need to consider such impacts in the preparation of plans, such as by avoiding development in areas potentially prone to flooding in the future, providing space for future flood defences, specifying minimum floor levels and setting specific development management objectives. Where models are not available Flood Zone B extents should be used as a surrogate for Flood Zone A with allowance for the possible impacts of climate change. If flood modelling is undertaken for Caherconlish, then future scenario mapping can also be produced to help assess the town’s sensitivity to climate change and help inform future planning.

Nature-based Solution and SuDS

The OPW welcomes the following objectives:

- IU O3 (c) *“Require all new developments to include Sustainable Urban Drainage Systems (SuDS) to control surface water outfall and protect water quality”*
- IU O3 (d) *“Require applicants to investigate the potential for the provision of porous surfaces, where car parking and hard landscaping is proposed”*
- IU O5 *“Promote integration and delivery of blue green infrastructure in new developments, public realm and community projects as a means of managing flood risk and enhancing the natural environment”*

The Guidelines recommend that the SFRA provide guidance on the likely applicability of different SuDS techniques for managing surface water run-off at key development

sites, and also that the SFRA identifies where integrated and area based provision of SuDS and green infrastructure are appropriate in order to avoid reliance on individual site by site solutions.

The OPW recommend that Limerick City & County Council reference the Best Practice Interim Guidance Document 'Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas' and consider the inclusion of objectives in relation to nature-based solutions.

Site Specific Flood Risk Assessment

The OPW welcomes objectives IU O4 (b) that “*applications in areas at risk of flooding to be supported by a comprehensive flood risk assessment. All flood risk assessments should have regard to ‘The Planning System and Flood Risk Management’ (DEHLG and OPW, Nov.2009)”, DECLG and OPW (2009)*”. Reference should be made to Section 5.8 *Requirements for a Flood Risk Assessment* in the SFRA of the Limerick City & County Development Plan 2022-2028.

Errata

Text in the Draft Plan which states that “*OPW CFRAM Study flood risk indicative maps are available for Caherconlish*” should be removed as no CFRAM mapping is available for the town and the PRFA indicative mapping has been superseded by the recently published national indicative fluvial, coastal and groundwater flood mapping. The OPW does not provide any predictive fluvial flood maps for catchments with an area of less than 5km² that were not included in the National CFRAM Programme. Planning Authorities may need to carry out their own Flood Risk Assessments to inform the definition of Flood Zones for these areas.

If further information or input is required, please do not hesitate to contact the OPW (floodplanning@opw.ie) in advance of the completion of the Proposed Caherconlish Local Area Plan 2023 - 2029.

Yours sincerely,



PP Conor Galvin
Flood Relief and Risk Management – Climate Adaption & Strategic Assessments