



Forward/Strategic Planning,
Economic Development Directorate
Limerick City & County Council,
Merchants Quay,
Limerick
V94 EH90

30/08/2021

RE: Draft Limerick City & County Development Plan 2022-2028

Dear Sir/Madam,

The OPW, as lead agency for flood risk management in Ireland, welcomes the opportunity to comment on the Draft Limerick City & County Development Plan 2022-2028.

The OPW welcomes the acknowledgement of the Guidelines on the Planning System and Flood Risk Management (DECLG/OPW, 2009), hereafter referred to as the 'Guidelines' and the proposed measures set out in the Flood Risk Management Plans (FRMPs) based on the work undertaken for the CFRAM Programme, and the preparation of a Strategic Flood Risk assessment (SFRA).

In particular, the OPW welcomes:

- Policy CAF P5 and objective CAF 020 requiring a Development Management Justification Test and SSFRA for any development inappropriate within a Flood Zone
- Objective IN01 regarding resilience to climate change and avoidance of flood risk in infrastructure planning
- Objective CAF 022 to work with other bodies to protect critical infrastructure from risk of flooding
- Objective CAF 025 to have regard for the recommendations set out in the SFRA

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

Settlements Level 5 and 6

The OPW welcomes the commentary on settlements level 5 and 6, that as the Justification Test has not been applied or passed that new, highly and less vulnerable development should be located within Flood Zone C and only minor development as per Section 5.28 (as amended) of the Guidelines and water compatible uses will be permitted in Flood Zones A and B.

Undeveloped Land

The OPW welcomes the commitment in section 6.1 of the SFRA that *"With the exception of zoned City Centre, Town or Village Centres, new development within Flood Zones A or B does not pass the Justification Test and will not be permitted. Whilst lands may have retained a zoning objective which would include development, applying the guidance in Section 5*



means such development is restricted to Flood Zone C, with water compatible uses located within Zone A and B.” It would be beneficial if this were supported by a policy objective.

Justification Tests

The OPW welcomes the inclusion of Plan-making Justification Tests supplied in the SFRA for Limerick City and Surroundings. However, proposed land use zones, some of which are classified as highly vulnerable development in the Guidelines are shown within Flood Zones A and B in the settlement zoning maps. Examples of these are detailed in the Comments on ‘Specific Locations’ section below. No commentary has been provided to demonstrate that the Plan Making Justification Test has been applied in proposing vulnerable development zoning within Flood Zones A and B.

Where it is intended to zone or otherwise designate land which is at moderate or high risk of flooding, then the appropriateness of the particular development should be rigorously assessed through the application of the Justification Test. The Guidelines set out that, at the Plan-making stage, land use zoning should be informed by the suitable level of FRA and if necessary a Justification test. Chapter 5 of the Guidelines sets out that *“most flood risk issues should be raised within strategic assessments undertaken by local authorities at the plan-making stage. Therefore, as more plans are reviewed and zoning reconsidered, there should be less need for development management processes to require detailed flood risk assessment”*.

As flood risk assessments are integrated with the SEA process, Section 3.10 also highlights the need that FRA’s be *“undertaken as early as possible in the process so that the SEA is fully informed of the flood risks and impacts of the proposed zoning or development”*.

If it is the case that these sites are already developed then 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. *“Where the planning authority considers that the existing use zoning is still appropriate, the planning authority 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”*.

For sites that are intended to be zoned for development following the application of a Justification Test where only a small proportion of the site is at risk of flooding, a policy objective might be attached to such zoning. Such an objective might require that the sequential approach be applied in the site planning, whereby to ensure no encroachment onto, or loss of the flood plain, or that only water compatible development such as *Open Space* would be permitted for the lands which are identified as being at risk of flooding within that site. Planning permission for these sites might then be subject to the sequential approach having been adopted and applied as above, following a detailed FRA.

National Indicative Fluvial Mapping (NIFM)

The OPW NIFM has been used as dataset in producing the flood risk mapping. It is stated in Table 4-1: Dataset Review of the SFRA that these maps are predictive flood maps, however it should be noted that these maps are indicative maps and are not predictive.



While these maps are an improvement on PFRA mapping, they are still indicative maps and the same cautions and limitations as outlined in Circular PL 2/2014 for PFRA should be followed.

Flood Relief Schemes

The OPW welcomes policy objectives CAF 023 and CAF 024 to support and facilitate the development of Flood Relief Schemes, Minor Flood and Mitigation Works and Coastal Protection Schemes. The OPW recommends that the text in these objectives could be clarified to ensure zoning or development proposals support and do not impede or prevent the progression of these measures.

Table 3-2, formal Flood Defence Infrastructure lists Foynes as the only complete scheme. There are also completed schemes in Clancy Strand, Dromcolliher, Harry's Mall (Limerick), Mulkear River (Cappamore), and Newcastle West.

Arterial Drainage Scheme

No commentary has been provided on the Deel, Groody, Maigne or Maigne Outfall Arterial Drainage Schemes. The OPW recommend that consideration be given in zoning land for development to ensure that access requirements are preserved for the maintenance of Arterial Drainage Schemes and Drainage Districts. 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.

Consideration of Climate Change Impacts

The OPW welcomes the discussion on climate change in the SFRA and in particular the consideration of future scenarios when assessing flood risk and the allowance for climate change in setting finished floor levels. It is noted in Section 4.4 of the SFRA that CFRAM and IPCSS provided future flood extents for it's AFAs. Future Scenario mapping is also available for NIFM mapping.

Coastal Change

It should be noted that the Government has established an Inter-Departmental Group on Coastal Change Management to scope out an approach for the development of a national coordinated and integrated strategy to manage the projected impact of coastal change to our coastal communities, economies, heritage, culture and environment. The Inter-Departmental Group is jointly chaired by the Department of Housing, Planning & Local Government and the OPW, and will bring forward options and recommendations for the Government to consider as soon as possible.

Mitigation Measures

The Flood Mitigation Measures at Site Design outlined in Section 5.10 of the SFRA are welcomed by the OPW and provide guidance on how residual flood risk can be managed to acceptable levels.

SuDS and Nature Based Solutions



The OPW welcomes the objectives EH 014, EH 015, EH 018, IN 010, CAF 06 and CAF 011, in relation to SuDS, nature based solutions and riparian buffers, and the requirement in section 7.5.5 of the Plan that all proposals in excess of 300m² incorporate green roofs into their surface water management systems.

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.

CFRAM Update

In Section 9 SFRA Review and Monitoring, it is noted in table 9-1: Possible Timescales that the CFRAM Studies run on a six yearly cycle. The CFRAM Programme has been completed and implementation of the outputs from this work is underway. The EU Floods Directive requires Member States to review the PFRA, the FRMPs and the flood maps on a six-yearly cycle. As part of the OPW commitment to carry out these reviews, the NIFM Programme has been completed. The OPW continues to update predictive flood mapping to provide the best available flood risk information through the map review programme, where a Flood Map Review Request Form has been submitted to the OPW and the criteria to trigger a review have been met.

Applications for Development in Areas at Risk of Flooding

The OPW welcomes the guidance for all development proposals in Section 5.8.2 of the SFRA, which is provided in a clear and concise format in the form of a checklist.

Historic Flood Events

Table 4-1 in the SFRA references historic flood events from www.floodmaps.ie. Please note that this website is no longer available and historic flood events are now available on www.floodinfo.ie.

Comments on Specific Locations

Limerick City Centre and Surroundings

The Flood Maps provided for Limerick City Centre and Surroundings in Volume 2 are unclear, and it is difficult to assess the zonings/sites that may be at flood risk. It appears that Flood Zone A has been omitted.

It is stated in the discussion on the *Industrial* and *Enterprise & Employment* zoned lands adjacent to Dock Road, that “*much of this industrial and enterprise use is marine based and therefore exempt from the Justification Test*” This is not consistent with the Guidelines. As both *Industrial* and *Enterprise & Employment* zonings can allow for less vulnerable usage, a Plan Making Justification Test is required prior to zoning these lands in Flood Zone A.

Highly vulnerable *Existing Residential*, *New Residential* and *City Centre* which could include highly vulnerable development have been zoned in Flood Risk areas. Highly vulnerable development is not appropriate in Flood Zone A and B, unless a Plan-making Justification Test completed by the local authority can be satisfied.



It is noted in the commentary on Limerick City Centre and Surroundings that where there is existing residential zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Caherdavin\Moyross

Highly vulnerable *Existing Residential, Education & Community Facilities* and *District Centre*, which can include highly vulnerable development, and *Enterprise & Employment* which can include less vulnerable development have been zoned in Flood Risk Areas. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that “*Where there is existing residential zoning within Flood Zone A or B, new development should be limited to minor development only*”. It would be beneficial if this were supported with a policy objective.

Coonagh\Clondrinagh

Highly vulnerable *Existing Residential, District Centre* which can include highly vulnerable residential, and less vulnerable *Enterprise & Employment* have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary on Coonagh\Clondrinagh that where there is existing residential zoning within Flood Zone A or B, new development should be limited to minor development only, and that *District Centre* and *Enterprise & Employment* zonings can be managed using the sequential approach. It would be beneficial if this were to be supported with policy objectives.

Limerick Southern Environs

It is stated in the commentary that areas zoned *Semi-Natural Open Space* and *Agriculture* located within Flood Zones should be maintained until the Limerick Flood Relief Scheme is in place. It should be noted that as Flood Zones are based on the undefended scenario, areas within should be assigned appropriate zonings regardless of whether there is a flood relief scheme in place.

It is also noted in the commentary that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Castletroy

Highly vulnerable *Existing Residential, Education & Community Facilities* which can allow highly vulnerable uses, and *High Tech Manufacturing* which can allow less vulnerable usage have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.



It is stated in the commentary on Castletroy that where there is existing residential zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Ballingarry

Highly vulnerable *Existing Residential*, and *Town Centre* which can include highly vulnerable development have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary on Ballingarry that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Bruff

Highly vulnerable *Existing Residential* has been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary on Bruff that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Bruree

Highly vulnerable *Existing Residential* has been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, unless a Plan-making Justification Test completed by the local authority can be satisfied.

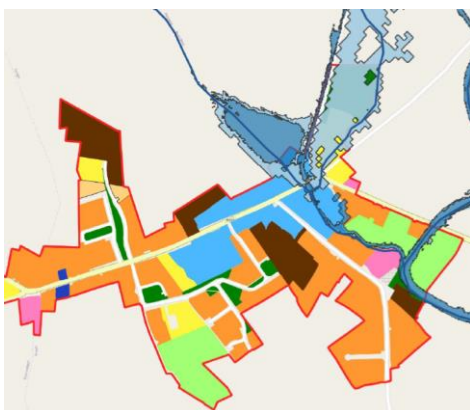
It is noted in the commentary on Bruree that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Cappamore

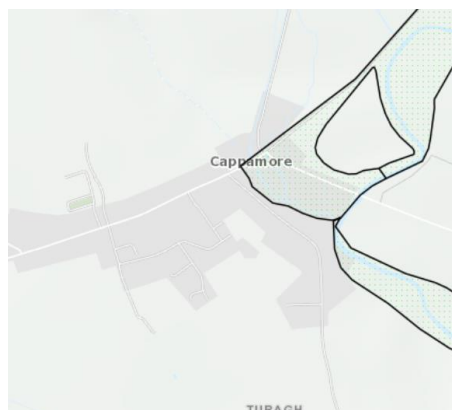
Highly vulnerable *Existing Residential*, *Town Centre*, which can include highly vulnerable development, and *Enterprise & Employment* which can include less vulnerable development have been zoned in Flood Zones A and B, and *Education & Community Facilities* which can include highly vulnerable development has been zoned in Flood Zone B. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that where there is *Existing Residential*, and *Community & Educational Facilities* zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Arterial Drainage Scheme benefitted lands extend into settlement centre, and their extents exceed those of the flood zones. 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.



Cappamore Land Use Flood Zone Map



Cappamore Arterial Drainage Scheme

Benefitted Lands Extents

Doon

Highly vulnerable *Existing Residential*, and *Town Centre* and *Community & Educational Facilities*, both of which can include highly vulnerable development, and *Enterprise & Employment* which can include less vulnerable development have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that where there is *Existing Residential* zoning, and in the *Community & Educational Facilities* lands within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Dromcolliher

Highly vulnerable *Existing Residential*, *Community & Educational Facilities*, *Town Centre* and *Utilities* which can include highly vulnerable development, and less vulnerable *Enterprise & Employment* have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that where *Town Centre* zoned lands intersect with flood risk areas, risks can be managed using the sequential approach, it would be beneficial if this were to be supported with a policy objective.

Foynes

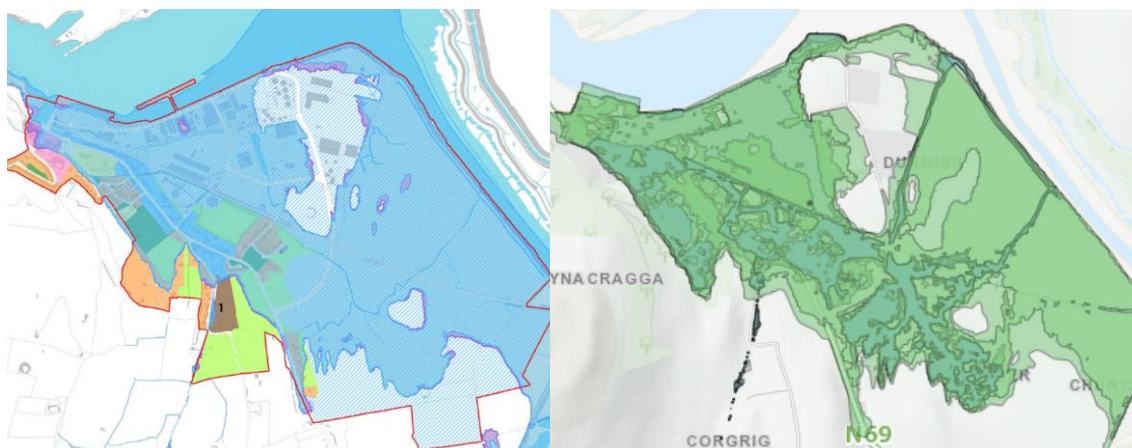
Highly vulnerable *Existing Residential*, *New Residential and Utilities*; *Community & Educational Facilities* and *Town Centre* which can include highly vulnerable development, and less vulnerable *Enterprise & Employment* have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only. It would be



beneficial if this were to be supported with a policy objective. Furthermore, it is stated that major development in the settlement will be premature until such time as the fluvial scheme has been completed, when the restriction of *Existing Residential* to minor works can also be reappraised. Flood Relief Schemes are designed to mitigate the risk of flooding to existing communities and properties only.

Future scenario mapping shows increases to flood zone extents in Foynes. Consideration might be given to policy objectives in relation to climate change and flood risk.



Foynes Current Scenario Land Use Flood Zone Map

Foynes High End Future Scenario Coastal and Fluvial mapping from www.floodinfo.ie

Glin

Highly vulnerable *Existing Residential* and less vulnerable *Enterprise & Employment* lands have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.

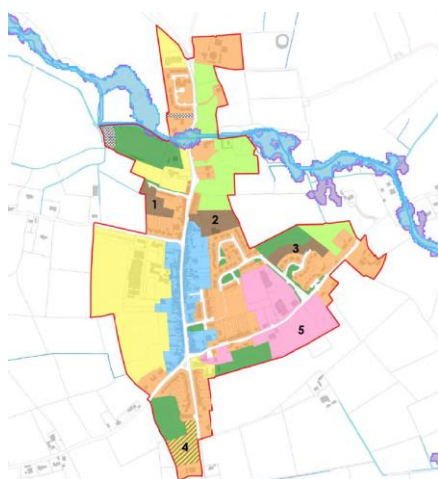
It is noted in the commentary that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only, and that *Enterprise & Employment* zoned lands are within flood zones risks be managed using the sequential approach. It would be beneficial if this were to be supported with policy objectives.

Hospital

Highly vulnerable *Existing Residential*, *Utilities*, and *Community & Educational Facilities* which can allow highly vulnerable development have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Arterial Drainage Scheme benefitted lands extend into settlement centre, and their extents exceed those of the flood zones. 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.



Hospital Land Use Flood Zone Map



Hospital Arterial Drainage Scheme
Benefitted Lands Extents

Kilfinane

Highly vulnerable *Existing Residential*, and *Community & Educational Facilities* which can allow highly vulnerable development have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only. It would be beneficial if this were to be supported with a policy objective.

Pallasgreen

Highly vulnerable *Existing Residential* and less vulnerable *Enterprise & Employment* lands have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B, and less vulnerable development is not appropriate in Flood Zone A unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only, and that *Enterprise & Employment* zoned lands are within flood zones risks be managed using the sequential approach. It would be beneficial if this were to be supported with policy objectives.

Pallaskenry

Highly vulnerable *New Residential*, *Existing Residential*, and *Community & Educational Facilities* which can allow highly vulnerable development have been zoned in Flood Zones A and B. Highly vulnerable development is not appropriate in Flood Zone A and B unless a Plan-making Justification Test completed by the local authority can be satisfied.

It is noted in the commentary that where there is *Existing Residential* zoning within Flood Zone A or B, new development should be limited to minor development only, and that *Enterprise & Employment* zoned lands are within flood zones risks be managed using the sequential approach. It would be beneficial if this were to be supported with policy objectives.



If further information or input is required, please do not hesitate to contact the OPW [REDACTED] in advance of the completion of the Draft Limerick City & County Development Plan 2022-2028.

Yours sincerely,

____*Niall Murphy*____

pp Conor Galvin

Flood Risk Management – Climate Adaptation and Strategic Assessments