

DRAFT RATHDRUM LOCAL AREA PLAN 2017

APPENDIX C

STRATEGIC FLOOD RISK ASSESSMENT



Wicklow County Council
February 2017

Rathdrum Local Area Plan – Strategic Flood Risk Assessment

1. Background information

1.1 Introduction

In accordance with the 'Planning System and Flood Risk Management: Guidelines for Planning Authorities', a Strategic Flood Risk Assessment (SFRA) of the 'Draft Rathdrum Town Plan 2017' has been undertaken.

The '*Planning System and Flood Risk Management – Guidelines for Planning Authorities*' were issued in 2009 by the Minister for the Environment, Heritage and Local Government and the OPW under Section 28 of the Planning and Development Act 2000 (as amended). The purpose of the Flood Risk Guidelines is to ensure that, where relevant, flood risk is a key consideration for Planning Authorities in preparing development plans and local area plans and in the assessment of planning applications. The Flood Risk Guidelines introduce mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. Implementation of the Flood Risk Guidelines is intended to be achieved through actions at the national, regional, local authority and site-specific levels. Planning Authorities and An Bord Pleanála are required to have regard to the Flood Risk Guidelines in carrying out their functions under the Planning Acts.

The key planning principles of the Flood Risk Guidelines are to:

- Avoid inappropriate development in areas at risk of flooding;
- Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water runoff;
- Ensure effective management of residual risks for development permitted in floodplains;
- Avoid unnecessary restriction of national, regional or local economic and social growth;
- Improve the understanding of flood risk among relevant stakeholders;
- Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.

Clarification of advice contained in the Flood Risk Guidelines was issued in August 2014 (Circular PL2/2014) referring to two matters. The first was to ensure planning authorities are prudent in the use the draft PFRA or CFRAM flood maps as the sole basis for deciding on planning applications, to make use of site inspections and/or knowledge of local areas, to request a site-specific flood risk assessment by an appropriately qualified engineer where appropriate and to also generally use their professional judgement in this regard.

The second matter amends the text of the guidelines to indicate that during the preparation of the development plan (or a variation of a development plan) in areas located in flood zone A and B, where the existing use zoning is classified as a "vulnerable use", the planning authority should consider if the existing use zoning of the 'vulnerable use' is still the appropriate zoning for the area. 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. With regard to the second matter, the text amendment is noted; however where the existing use zoning is in flood zone A/B and is considered a vulnerable use, where necessary a mitigation objective has been incorporated into the local plan and/or an appropriate zoning has been applied for the existing use. Any flood risk management measures are to be considered at the development management stage.

The guidelines aim to facilitate the transparent consideration of flood risk at all levels of the planning process, ensuring a consistency of approach throughout the country. SFRA's therefore become a key evidence base in meeting these objectives.

The Guidelines work on a number of key principles, including:

- adopting a staged and hierarchical approach to the assessment of flood risk; and
- adopting a sequential approach to the management of flood risk, based on the frequency of flooding (identified through Flood Zones) and the vulnerability of the proposed land use.

1.2 Definition of Flood Zones

In the 'Planning System and Flood Risk Management: Guidelines for Planning Authorities', 'Flood Zones' are used to indicate the likelihood of a flood occurring. These zones indicate a high, moderate and low risk of flooding from fluvial or coastal sources and are defined as follows:

- **Flood Zone A** – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);
- **Flood Zone B** – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding).
- **Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 100 for both river and coastal flooding). Flood Zone C covers all areas of the plan which are not in zones A and B, hence it is not highlighted on the FRA maps.

The flood zones described above are indicative of river and coastal flooding only. They should not be used to suggest that any areas are free from flood risk, since they do not include the effects of other forms of flooding such as from groundwater or artificial drainage systems.

The indicative Flood Zone map for the plan area is included in Map C1. The information about flood risk that has been used in the preparation of these flood zones has been collated from a number of sources including:

- OPW Preliminary Flood Risk Assessment (PFRA) – no CFRAM has been prepared for Rathdrum. The OPW published the 'Preliminary Flood Risk Assessment' (PFRA) mapping in 2011 and published 'Areas for Further Assessment' (AFA) in 2014. The PFRAs covered the County and identified areas at risk of significant flooding and includes maps showing areas deemed to be at risk. The areas deemed to be at significant risk, where the flood risk is of particular concern nationally, are identified as Areas for Further Assessment (AFAs) and more detailed assessment on the extent and degree of flood risk was undertaken in these areas, with Flood Hazard Mapping (CFRAMs) published in 2016. In Wicklow the AFAs / CFRAMs cover all or part of the following areas: Arklow, Ashford, Aughrim, Avoca, Baltinglass, Blessington, Greystones & environs, Kilcoole, Newcastle, Rathnew and Wicklow, but not Rathdrum (see Map C1.1)
- 'Floodmaps.ie' – The national flood hazard mapping website operated by the Office of Public Works, where information about past flood events is recorded and made available to the public. 'Flood point' information is available on this site and has been noted.
- Alluvial deposits maps of the Geological Survey of Ireland – indicating areas that have flooded in the past (the source of alluvium) (see Map C1.2)
- Examination of the old '6 Inch' maps (see Map C1.3)
- Walk over survey to assess potential sources of flooding

- Discussions with local people
- Consultation with the engineering section of Wicklow County Council
- An examination of contours (see Map C1.4)
- Aerial photographs
- Any in-house Flood Risk Assessments of Avonmore River or assessments submitted as part of planning applications.

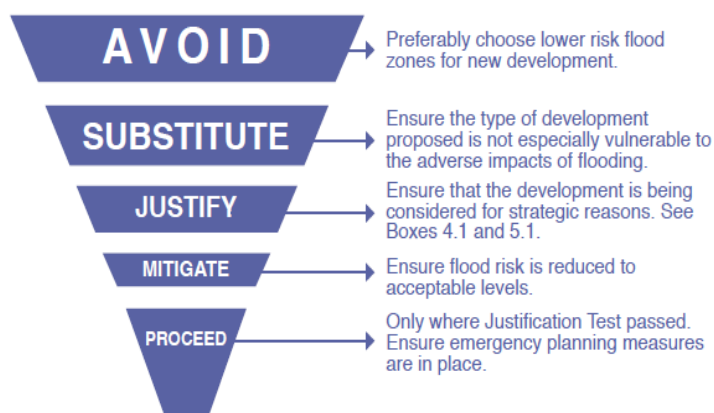
In preparing the Flood Zones, a precautionary approach has been applied, where necessary, to reflect uncertainties in flooding datasets and risk assessment techniques.

1.3 The Sequential Approach and Justification Test

Each stage of the SFRA process aims to adopt a sequential approach to management of flood risk in the planning process. The sequential approach to flood risk management is set out in Figure 1. In summary, the key principles of the sequential approach include:

1. Avoid flood risk, where possible;
2. Substitute less vulnerable uses, where avoidance is not possible; and
3. Mitigate and manage the risk, where avoidance and substitution are not possible.

Figure 1: Sequential approach principles in flood risk management



Source: *Planning System and Flood Risk Management: Guidelines for Planning Authorities' DoEHLG/OPW, 2009*

In other words, where possible, development in areas identified as being at flood risk should be avoided; this may necessitate de-zoning lands within the plan area. If de-zoning is not possible, then re-zoning from a higher vulnerability land use, such as residential, to a less vulnerability use, such as open space, may be required. Where re-zoning is not possible, exceptions to the development restrictions are provided for through the '**Justification Test**'. The plan-making Justification Test is used at the plan preparation and adoption stage where a planning authority needs to consider the future development of areas at a high or moderate risk of flooding, for uses or development vulnerable to flooding that would generally be inappropriate. In such cases, the planning authority must be satisfied that it can clearly demonstrate on a solid evidence base that the zoning or designation for development will satisfy the Justification Test.

Tables 1.1 and 1.2 below illustrates those types of development that would be appropriate to each flood zone and those that would be required to meet the Justification Test. Section 2.2 sets out the Justification Test for plan making. Where the planning authority considers that land should be zoned for 'inappropriate development' that does not meet the criteria of the Justification Test, the flooding risk should be mitigated, so that the flood risk is reduced to an acceptable level by means of land use strategies or by means of detailed proposals for the management of flood risk, as addressed in a Flood Risk Assessment.

Table 1.1: Matrix of vulnerability versus flood zones to illustrate appropriate development and that required to meet the justification test

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water-compatible development	Appropriate	Appropriate	Appropriate

Source: Table 3.2 of *Planning System and Flood Risk Management: Guidelines for Planning Authorities' DoEHLG/OPW, 2009*

Table 1.2: Classification of vulnerability of different types of development

Vulnerability class	Land uses and types of development which include*:
Highly vulnerable development (including essential infrastructure)	<p>Garda, ambulance and fire stations and command centres required to be operational during flooding;</p> <p>Hospitals;</p> <p>Emergency access and egress points;</p> <p>Schools;</p> <p>Dwelling houses, student halls of residence and hostels;</p> <p>Residential institutions such as residential care homes, children's homes and social services homes;</p> <p>Caravans and mobile home parks;</p> <p>Dwelling houses designed, constructed or adapted for the elderly or, other people with impaired mobility; and</p> <p>Essential infrastructure, such as primary transport and utilities distribution, including electricity generating power stations and sub-stations, water and sewage treatment, and potential significant sources of pollution (SEVESO sites, IPPC sites, etc.) in the event of flooding.</p>
Less vulnerable development	<p>Buildings used for: retail, leisure, warehousing, commercial, industrial and non-residential institutions;</p> <p>Land and buildings used for holiday or short-let caravans and camping, subject to specific warning and evacuation plans;</p> <p>Land and buildings used for agriculture and forestry;</p> <p>Waste treatment (except landfill and hazardous waste);</p> <p>Mineral working and processing; and</p> <p>Local transport infrastructure.</p>
Water-compatible development	<p>Flood control infrastructure;</p> <p>Docks, marinas and wharves;</p> <p>Navigation facilities;</p> <p>Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location;</p> <p>Water-based recreation and tourism (excluding sleeping accommodation);</p> <p>Lifeguard and coastguard stations;</p> <p>Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms; and</p> <p>Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).</p>
*Uses not listed here should be considered on their own merits	

Table 3.1 Classification of vulnerability of different types of development

Source: Table 3.1 of *Planning System and Flood Risk Management: Guidelines for Planning Authorities'* DoEHLG/OPW, 2009

2. Strategic Flood Risk Assessment of the Draft Rathdrum Local Area Plan 2017

2.1 Flood Risk Assessment

Following the guidelines, this flood risk assessment shows the zoning objectives of the plan and their typical permitted uses. In accordance with the guidelines an assessment was undertaken to determine the appropriateness of land uses (allowed by virtue of land use zoning) to each flood zone. The assessment is undertaken in accordance with Tables 3.1 and 3.2 of the guidelines and measures vulnerability to flooding of different types of development, to illustrate appropriate development that is required to meet the Justification Test. Where the zone is deemed to be appropriate no further action is required here in the FRA. Where the zone requires the Justification Test to be carried out, it is done so with any necessary mitigation measures recommended.

The Draft Rathdrum Town Plan 2014 includes the following land use zonings:

ZONING	OBJECTIVE	DESCRIPTION
RE: Existing Residential	To protect, provide and improve residential amenities of existing residential areas	To provide for house improvements, alterations and extensions and appropriate infill residential development in accordance with principles of good design and protection of existing residential amenity. In existing residential areas, the areas of open space permitted, designated or dedicated solely to the use of the residents will normally be zoned 'RE' as they form an intrinsic part of the overall residential development; however new housing or other non-community related uses will not normally be permitted.
R20: New residential	To protect, provide and improve residential amenities at a density up to 20 units/ha.	To facilitate for the provision of high quality new residential developments at appropriate densities with excellent layout and design, well linked to the town centre and community facilities. To provide an appropriate mix of house sizes, types and tenures in order to meet household needs and to promote balanced communities.
R10: New residential Rural Fringe	To protect, provide and improve residential amenities at a lower density not exceeding 10 units/ha.	To facilitate for the provision of high quality new residential environments with excellent layout and design, reflecting the low-medium density character of the surrounding area.
TC: Town Centre	To provide for the development and improvement of appropriate town centre uses including retail, commercial, office and civic use,	To develop and consolidate the existing town centre to improve its vibrancy and vitality with the densification of appropriate commercial and residential developments ensuring a mix

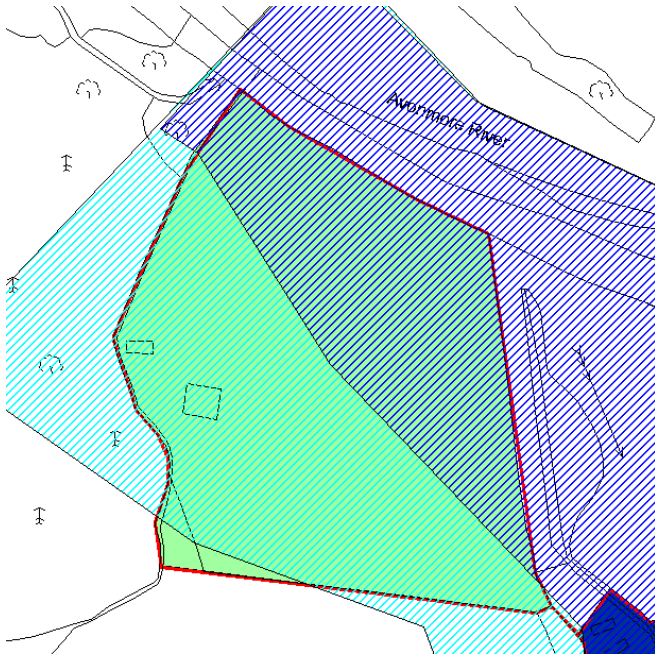
	and to provide for 'Living Over the Shop' residential accommodation, or other ancillary residential accommodation.	of commercial, recreational, civic, cultural, leisure, residential uses, and urban streets, while delivering a quality urban environment which will enhance the quality of life of resident, visitor and workers alike. The zone will strengthen retail provision in accordance with the County Retail Strategy, emphasise town centre conservation, ensure priority for public transport where applicable, pedestrians and cyclists while minimising the impact of private car based traffic and enhance and develop the existing centre's fabric.
VC: Village Centre Low Town	To provide for the development and improvement of appropriate village centre uses in the Low Town areas, including retail, commercial, office and civic use, and to provide for 'Living Over the Shop' residential accommodation, or other ancillary residential accommodation.	To develop and consolidate the Low Town area in an appropriate manner and to an appropriate scale given its role as a secondary or subsidiary area to the main town centre.
E: Employment	To provide for the development of enterprise and employment	To facilitate the further development and improvement of existing employment areas and to facilitate opportunities for the development of new high quality employment and enterprise developments in a good quality physical environment.
CE: Community & Education	To provide for civic, community and educational facilities	To facilitate the development of necessary community, health, religious, educational, social and civic infrastructure.
AOS: Active Open Space	To protect and enhance existing and provide for new active open space	To facilitate the further development and improvement of existing active open spaces, formal exercise areas, sports grounds, playing pitches, courts and other games areas and to facilitate opportunities for the development of new high quality active recreational areas
OS1: Open Space	To protect and enhance existing and provide for recreational open space	To facilitate the further development and improvement of existing parks and casual play areas, to facilitate opportunities for the development of new high quality amenity open areas and to restrict developments / activities (such as the use or development of such lands for formal sports grounds for organisations that are not available for a broad range of the public) that would reduce the opportunities for use by the wider public.
OS2: Open Space	To protect and enhance existing open, undeveloped lands	To protect, enhance and manage existing open, undeveloped lands that comprise flood

		plains, buffer zones along watercourses and rivers, steep banks, green breaks between built up areas, green corridors and areas of natural biodiversity.
PU: Public Utility	To maintain lands providing services infrastructure	To allow for lands to be designated for public utilities such as waste water treatment plants, large ESB sub-stations, gasworks etc
T: Tourism	To provide for tourism related development	To provide for the sustainable development of tourism related structures, uses and infrastructure. To provide for the development of tourism facilities including accommodation of an excellent sustainable design and aesthetic quality. Tourism related office, civic and cultural and commercial development will be facilitated.
MU: Mixed Use	To provide for mixed use development	The nature of the mixed use development envisaged for any particular site is set out in the text of the plan.

2.2 Flood Risk Zones and Justification Test

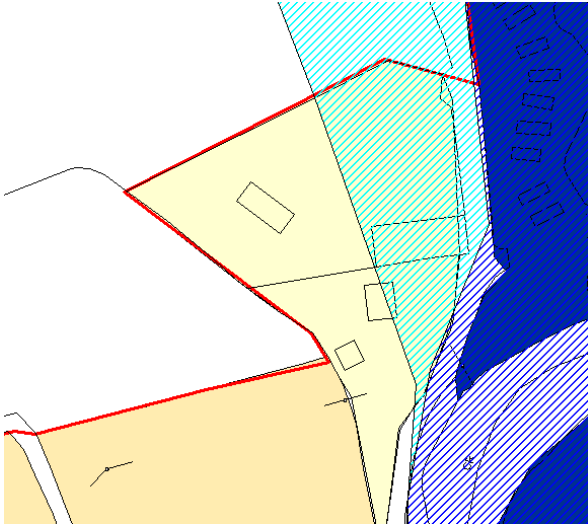
The following is an analysis of the vulnerability of land uses on sites that fall within Flood Zone A and B, and where appropriate, the application of the Justification Test for plan making. All sites are indicated on Map C2.

Site no. 1 AOS Rathdrum rugby club



Land zoning	Active Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no. 2 RE zone west of Hidden Valley Caravan Park

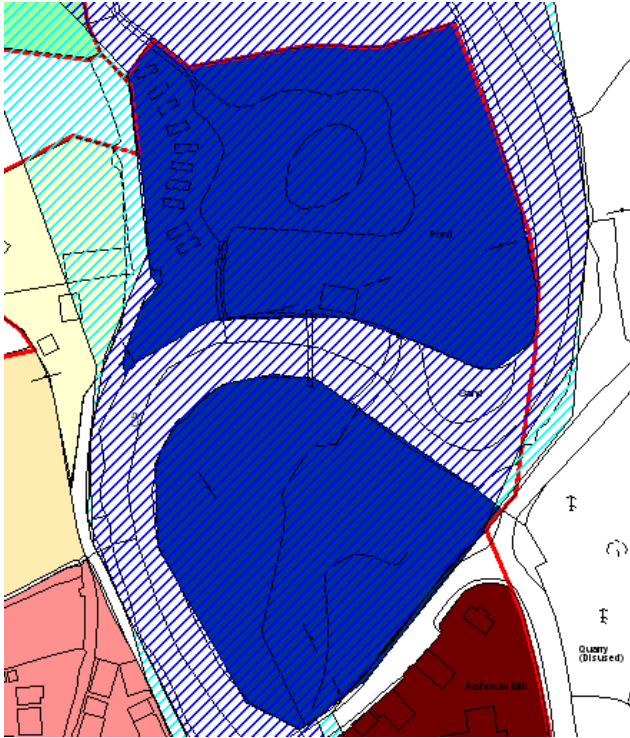


Land zoning	Existing residential
Flood Zone	B & C
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

Justification Test		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Rathdrum is designated a Level 5 Small Growth Town. Under the 'core strategy' of the CDP, the population of Rathdrum is targeted to grow to 3,500.
	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	N/A - these lands are developed.
	A flood risk assessment to an appropriate level of detail has been carried out as part of the	Assessment of flood risk has been incorporated into the County Development Plan SEA process.

	Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	
Conclusion		
Justification test failed		
Recommendation		
Justification test failed. These lands are currently developed for permitted housing. As such, it is considered appropriate to retain the RE zoning objective. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of existing uses be proposed, flood mitigation measures are required (refer Section 2.3 of this document).		

Site no. 3 Tourism zone Hidden Valley Caravan Park

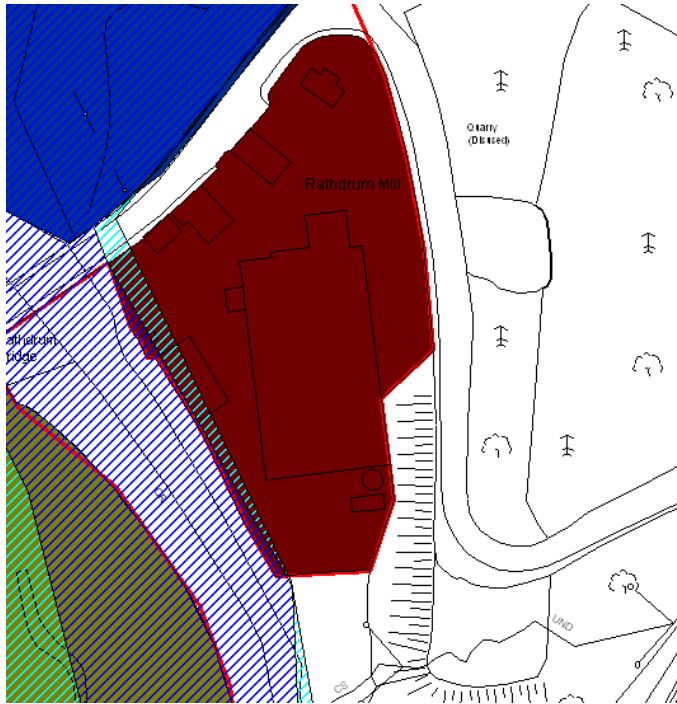


Land zoning	Tourism
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

Justification Test		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Rathdrum is designated a Level 5 Small Growth Town. Under the 'core strategy' of the CDP, the population of Rathdrum is targeted to grow to 3,500.
	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No

	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	N/A - these lands are developed.
	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the County Development Plan SEA process.
Conclusion		
Justification test failed		
Recommendation		
Justification test failed. These lands are currently developed for permitted tourism use – static chalets, service building, plots for mobile caravans / camping and recreational facilities (e.g. playground). As such, it is considered appropriate to retain the Tourism zoning objective. Applications for minor development are unlikely to raise significant flooding issues. Should expansion of existing uses be proposed, flood mitigation measures are required (refer Section 2.3 of this document).		

Site no. 4 Mixed Use Zone Rathdrum Mill

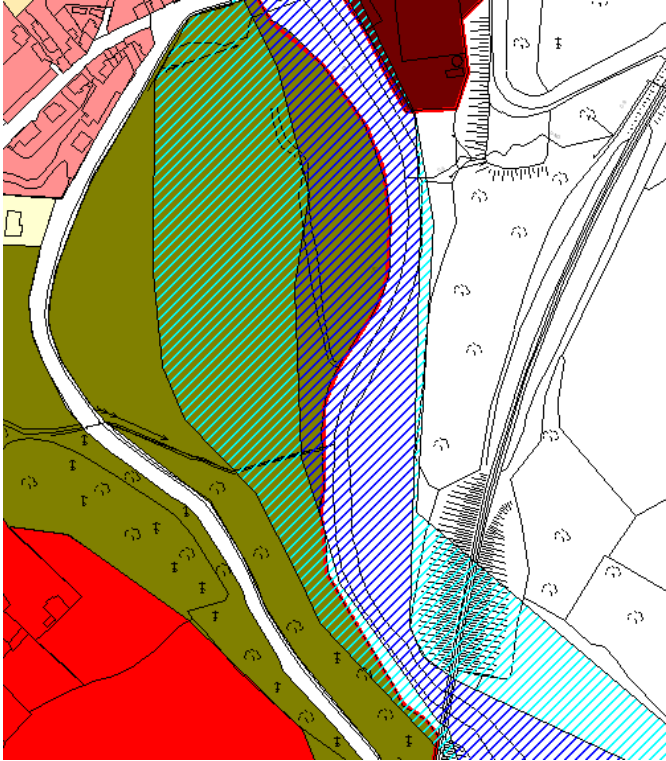


Land zoning	Mixed Use
Flood Zone	A, B & C
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

Justification Test		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Rathdrum is designated a Level 5 Small Growth Town. Under the 'core strategy' of the CDP, the population of Rathdrum is targeted to grow to 3,500.
	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	Yes
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for	N/A - these lands are developed.

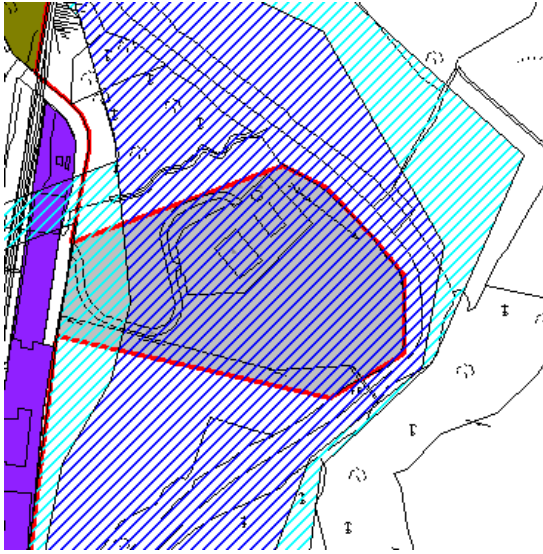
	the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	
	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the County Development Plan SEA process.
Conclusion		
Justification test failed		
Recommendation		
<p>Justification test failed.</p> <p>Only a very narrow strip of this site along the river frontage is deemed to be within Flood Zones A and B. The majority of the site is located in Flood Zone C. These lands are currently developed for permitted employment use – former corn mill buildings (vacant), modern mill and grain stores, agricultural retail outlet and associated yards and stores. Such uses constitute ‘less vulnerable development’ and are generally acceptable for Flood Zones B and C.</p> <p>The proposed zoning would allow for a greater range of uses including ‘highly vulnerable development’. However, the zoning is not prescriptive as to the location of any such uses within the site and the objectives for this zone can be achieved on lands located in either Flood Zone B or C. Should permission be sought for inappropriate development in Flood Zone A or B, flood mitigation measures are required (refer Section 2.3 of this document).</p>		

Site no. 5 OS1



Land zoning	Open Space
Flood Zone	A, B & C
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no. 6 Public Utility Rathdrum WWTP



Land zoning	PU Public Utility
Flood Zone	A, B & C
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

Justification Test		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Rathdrum is designated a Level 5 Small Growth Town. Under the 'core strategy' of the CDP, the population of Rathdrum is targeted to grow to 3,500.
	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	Yes
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	Yes

	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	N/A - these lands are developed.
	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the County Development Plan SEA process.
Conclusion		
Justification test failed		
Recommendation		
<p>Justification test failed.</p> <p>These lands are currently developed for permitted wastewater treatment plant. As such, it is considered appropriate to retain the PU zoning objective. Applications for minor development are unlikely to raise significant flooding issues. Should expansion of existing uses be proposed, flood mitigation measures are required (refer Section 2.3 of this document).</p>		

Site no. 7 E, RE, MU and OS zones to west of Railway Station



Land zoning	E, RE, MU and OS
Flood Zone	B & C
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

Justification Test		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Rathdrum is designated a Level 5 Small Growth Town. Under the 'core strategy' of the CDP, the population of Rathdrum is targeted to grow to 3,500.
	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	Yes

	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	N/A - these lands are developed.
	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the County Development Plan SEA process.
Conclusion		
Justification test failed for Site 7c and 7d.		
Recommendation		
<p>Site 7a: Justification test passed. These lands are currently developed for employment uses. Such use is appropriate for Flood Zone B.</p> <p>Site 7b: Justification test passed. These lands are zone open space. Such use is appropriate for Flood Zone B.</p> <p>Site 7c: Justification test failed. These lands are currently developed for permitted housing. As such, it is considered appropriate to retain the RE zoning objective. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of existing uses be proposed, flood mitigation measures are required (refer Section 2.3 of this document).</p> <p>Site 7d: Justification test failed. Only a very narrow strip of this site along the stream is deemed to be within Flood Zone B. The majority of the site is located in Flood Zone C. These lands are currently undeveloped.</p> <p>The proposed Mixed Use zoning would allow for a greater range of uses including 'highly vulnerable development'. However, the zoning is not prescriptive as to the location of any such uses within the site and the objectives for this zone can be achieved on lands located in Flood Zone C. Should permission be sought for inappropriate development in Flood Zone B, flood mitigation measures are required (refer Section 2.3 of this document).</p>		

2.3 Mitigation Objectives

In order to properly manage flood risk, the following mitigation objectives are included in the County Development Plan 2016-2022; the Rathdrum LAP is a subsidiary plan to the County Development Plan, and these objectives will apply in Rathdrum:

- FL1** To prepare new or update existing flood risk assessments and flood zone maps for all zoned lands within the County as part of the review process for Local Area Plans, zoning variations and Town Plans, where considered necessary.
- FL2** To implement the 'Guidelines on the Planning System and Flood Risk Management' (DoEHLG/OPW, 2009).
- FL3** The zoning of land that has been identified as being at a high or moderate flood risk (flood zone A or B) shall be in accordance with the requirements of the Flood Risk Guidelines and in particular the 'justification test for development plans' (as set out in Section 4.23 and Box 4.1 of the guidelines).
- FL4** Applications for new developments or significant alterations/extension to existing developments in a flood risk area shall comply with the following:
- Follow the 'sequential approach' as set out in the Flood Risk Guidelines.
 - Flood risk assessments will be required with all planning applications proposed in areas identified as having a flood risk, to ensure that the development itself is not at risk of flooding and the development does not increase the flood risk in the relevant catchment (both up and down stream of the application site).
 - Where a development is proposed in an area identified as being at low or no risk of flooding, where the planning authority is of the opinion that flood risk may arise or new information has come to light that may alter the flood designation of the land, an appropriate flood risk assessment may be required to be submitted by an applicant for planning permission.
 - Restrict the types of development permitted in Flood Zone A and Flood Zone B to that are 'appropriate' to each flood zone, as set out in Table 3.2 of the guidelines for Flood Risk Management (DoEHLG/OPW, 2009).
 - Developments that are an 'inappropriate' use for a flood zone area, as set out in Table 3.2 of the guidelines, will not be permitted, except where a proposal complies with the 'Justification Test for Development Management', as set out in Box 5.1 of the Guidelines.
 - Flood Risk Assessments shall be in accordance with the requirements set out in the Guidelines.
 - Generally a Flood Impact Assessment will be required with all significant developments and a certificate (from a competent person stating that the development will not contribute to flooding within the relevant catchment) will be required with all small developments of areas of 1 hectare or less.
- FL5** To prohibit development in river flood plains or other areas known to provide natural attenuation for floodwaters except where the development can clearly be justified with the Flood Risk Guidelines 'Justification test'.
- FL6** To limit or break up large areas of hard surfacing in new developments and to require all surface car parks to integrate permeability measures such as permeable paving.
- FL7** Excessive hard surfacing shall not be permitted for new, or extensions to, residential or commercial developments and all applications will be required to show that sustainable drainage techniques have been employed in the design of the development.

- FL8** To require all new developments to include proposals to deal with rain and surface water collected on site and where deemed necessary, to integrate attenuation and SUDS measures.
- FL9** For developments adjacent to all watercourses of a significant conveyance capacity or where it is necessary to maintain the ecological or environmental quality of the watercourse, any structures (including hard landscaping) must be set back from the edge of the watercourse to allow access for channel clearing/ maintenance / vegetation. A minimum setback of up to 10m (or other width, as determined by the Council) will be required either side depending on the width of the watercourse.

4. Disclaimer

Rathdrum Strategic Flood Risk Assessment

Please read below the disclaimer and limitations associated with this assessment to avoid incorrect interpretation of the information and data provided.

Wicklow County Council makes no representations, warranties or undertakings about any of the information provided in this assessment and associated maps including, without limitations, on its accuracy, completeness, quality or fitness for any particular purpose. To the fullest extent permitted by applicable law Wicklow County Council nor any of its members, offices, associates, consultants, employees, affiliates, servants, agents or other representatives shall be liable for loss or damage arising out of, or in connection with, the use of, or the inability to use, the information provided in this assessment including but not limited to, indirect or consequential loss or damages, loss of data, income, profit, or opportunity, loss of, or damages to, property and claims of third parties, even if Wicklow County Council has been advised of the possibility of such loss or damages, or such loss or damages were reasonably foreseeable. Wicklow County Council reserves the right to change the content and / or presentation of any of the information provided in this report at their sole discretion, including these notes and disclaimer. This disclaimer, guidance notes and conditions of use shall be governed by, and construed in accordance with, the laws of the Republic Of Ireland. If any provision of this disclaimer, guidance notes and conditions of use shall be unlawful, void or for any reason unenforceable, that provision shall be deemed severable and shall not affect the validity and enforceability of the remaining provisions.

This SFRA is based on information from the sources outlined in Section 1.2 of this report. The following notes on Uncertainty and Best Available Information are attached to these studies,

UNCERTAINTY

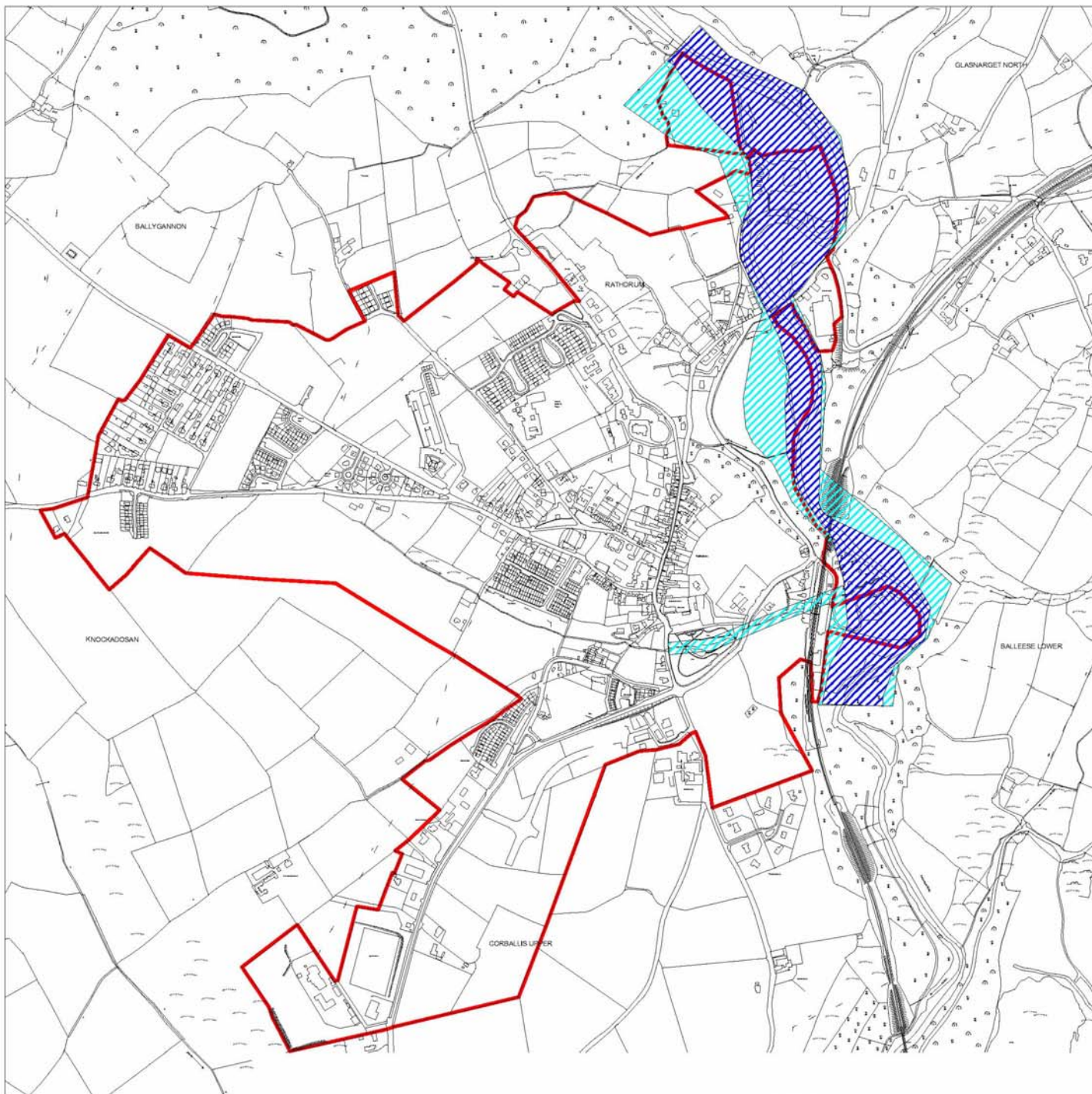
Although great care and modern, widely-accepted methods have been used in the preparation of this assessment there is inevitably a range of inherent uncertainties and assumptions made during the estimation of design flows and the construction of flood models.

BEST AVAILABLE INFORMATION

There has been a wide range of datasets utilised in the production of this plan which are constantly changing and subsequently the analysis of these datasets is only correct at the time of assessment.

It is important to note that compliance with the requirements of 'The Planning System and Flood Risk Management-Guidelines for Planning Authorities' is a work in progress and is currently based on emerging and incomplete data as well as estimates of the locations and likelihood of flooding. As a result, this Strategic Flood Risk Assessment was based on available information at the time of assessment.

All information in relation to flood risk may be substantially altered in light of future data, new methodologies and/or analysis. As a result, all landowners and developers are advised that Wicklow County Council can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. Owners, users and developers are advised to take all reasonable measures, including professional advice, to assess the vulnerability to flooding of lands in which they have an interest prior to making planning or development decisions.



**Rathdrum Local Area Plan 2017
(draft)**

**WICKLOW COUNTY
DEVELOPMENT PLAN 2016-2022**

 Flood Zone A

 Flood Zone B

 Plan boundary

Title: Indicative Flood Zones Map C1

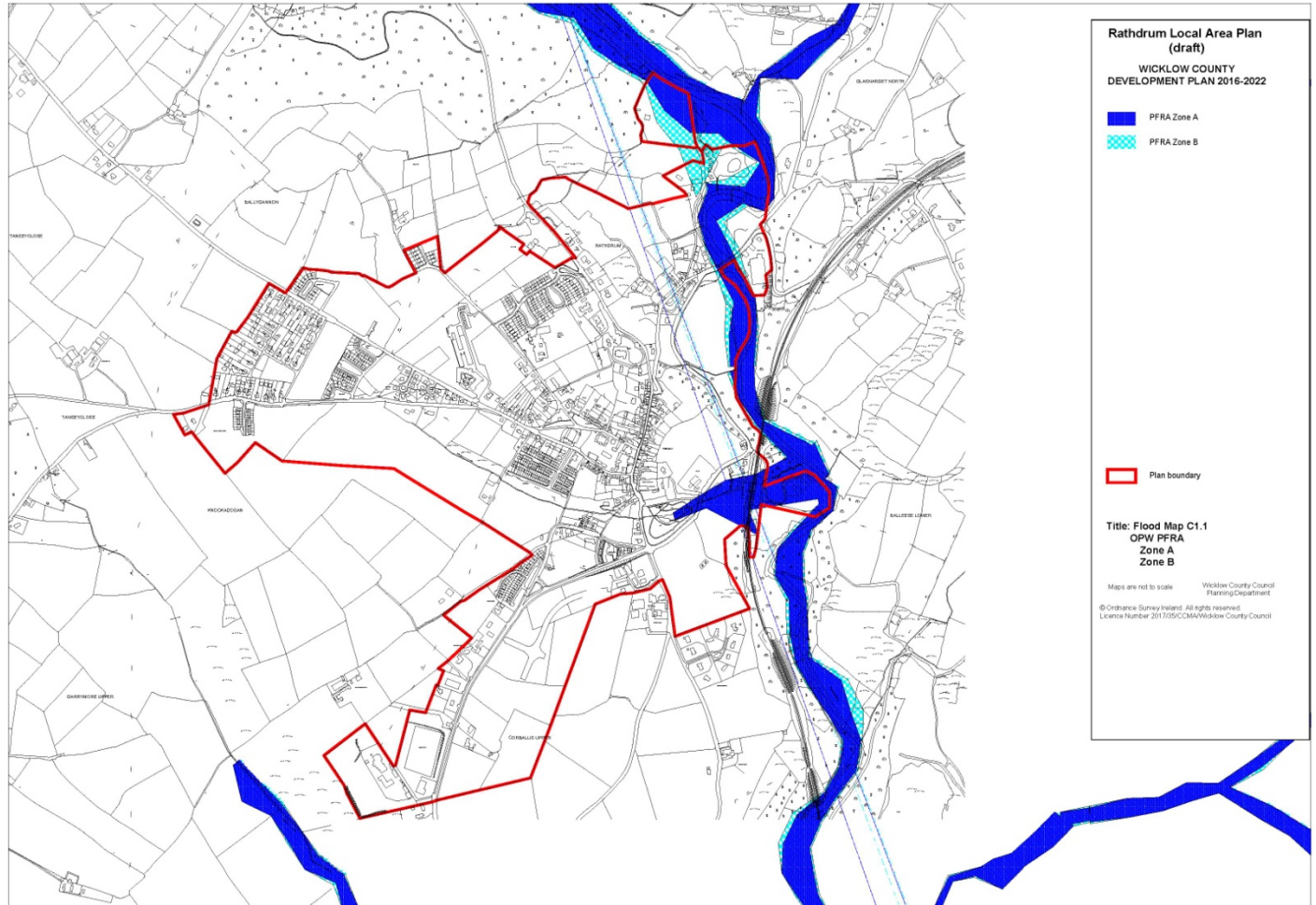
Maps are not to scale

Wicklow County Council
Planning Department

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Background Data Sources

PFRA



← → ↻ www.floodmaps.ie/View/Default.aspx

OPW National Flood Hazard Mapping

Navigation Tools Selection Tools

Use the Search options below to find Flood Events by Location

County:
 Town:
 or Townland:
 Catchment:
 National Grid Reference:

[Open Advanced Search](#)

Search Results: Marquee
 (1-2) of 3 Results Listed.

1. Flood Event: Avonmore River 24th Oct 2011 Rathdrum
 Start Date: 24/Oct/2011
 County: Wicklow
 Flood Quality Code: 2
Additional Information
[Reports \(1\)](#) [More Mapped Information](#)

2. Flood Event: Rathdrum Avonmore River August 1986
 Start Date: 26/Aug/1986
 County: Wicklow
 Flood Quality Code: 2
Additional Information
[Reports \(3\)](#) [Press Archive \(2\)](#) [More Mapped Information](#)

(1-2) of 3 Results Listed.

www.floodmaps.ie/View/FloodReports.aspx?Type=Reports&FloodId=11485

OPW National Flood Hazard Mapping **Reports**

Flood Event: Avonmore River 24th Oct 2011 Rathdrum

Start Date: 24/Oct/2011
 County: Wicklow
 Flood Quality Code: 2
 National Grid Reference: T 194 881

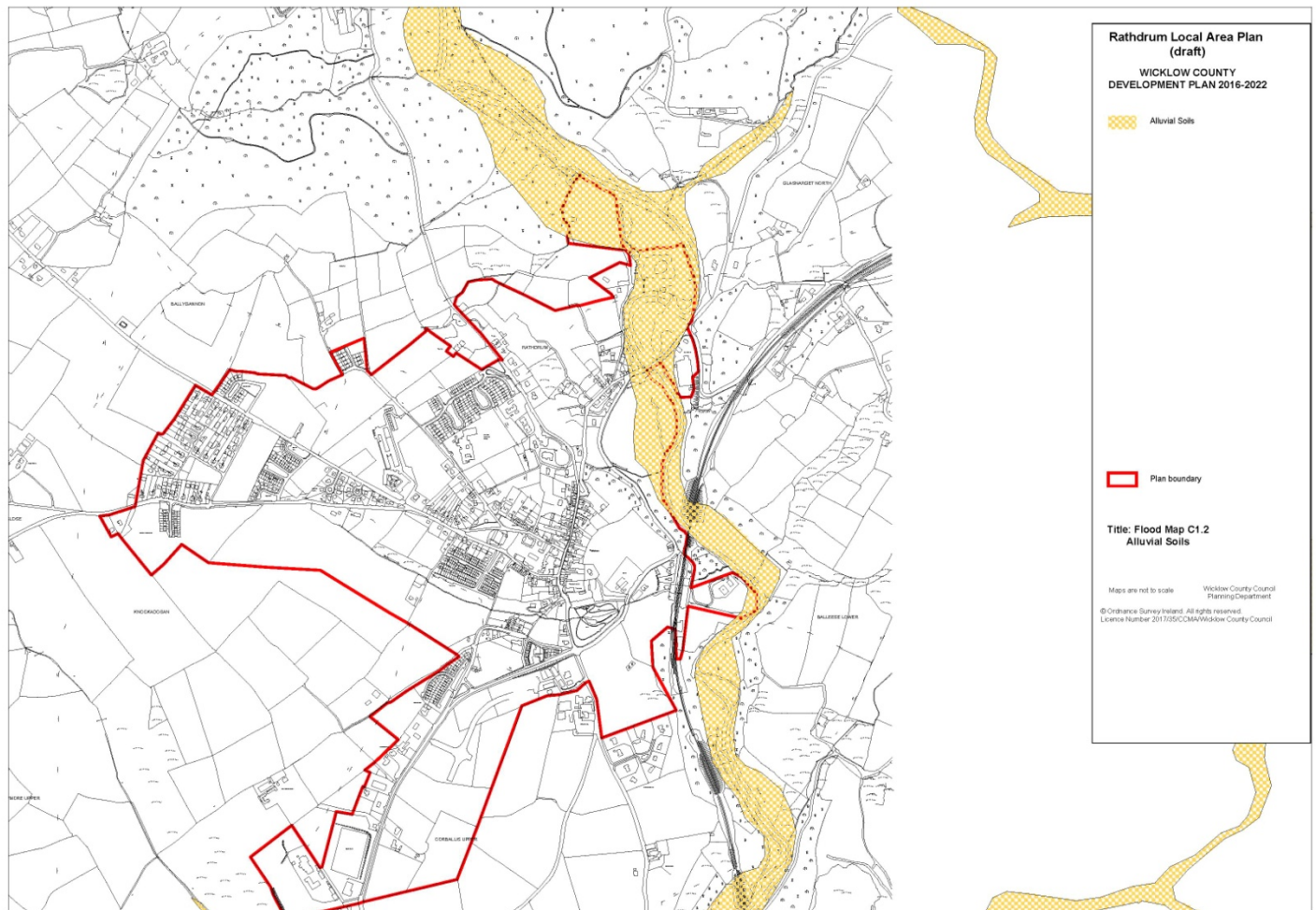
Report Type	Report Name	File Type & Size	Date	Quality Code	Description	Source of Information
Report	East Coast Selected Catchments 24th October 2011	.pdf (837Kb)	01/Nov/2011	2	Details of various east coast catchments - hydrometric stations during the 24/10/2011 event and comparison with Hurricane Charlie event of 26th August 1986. Information on rainfall also provided. (Report Includes: Source, Cause)	EPA

Flood Event: Rathdrum Avonmore River August 1986

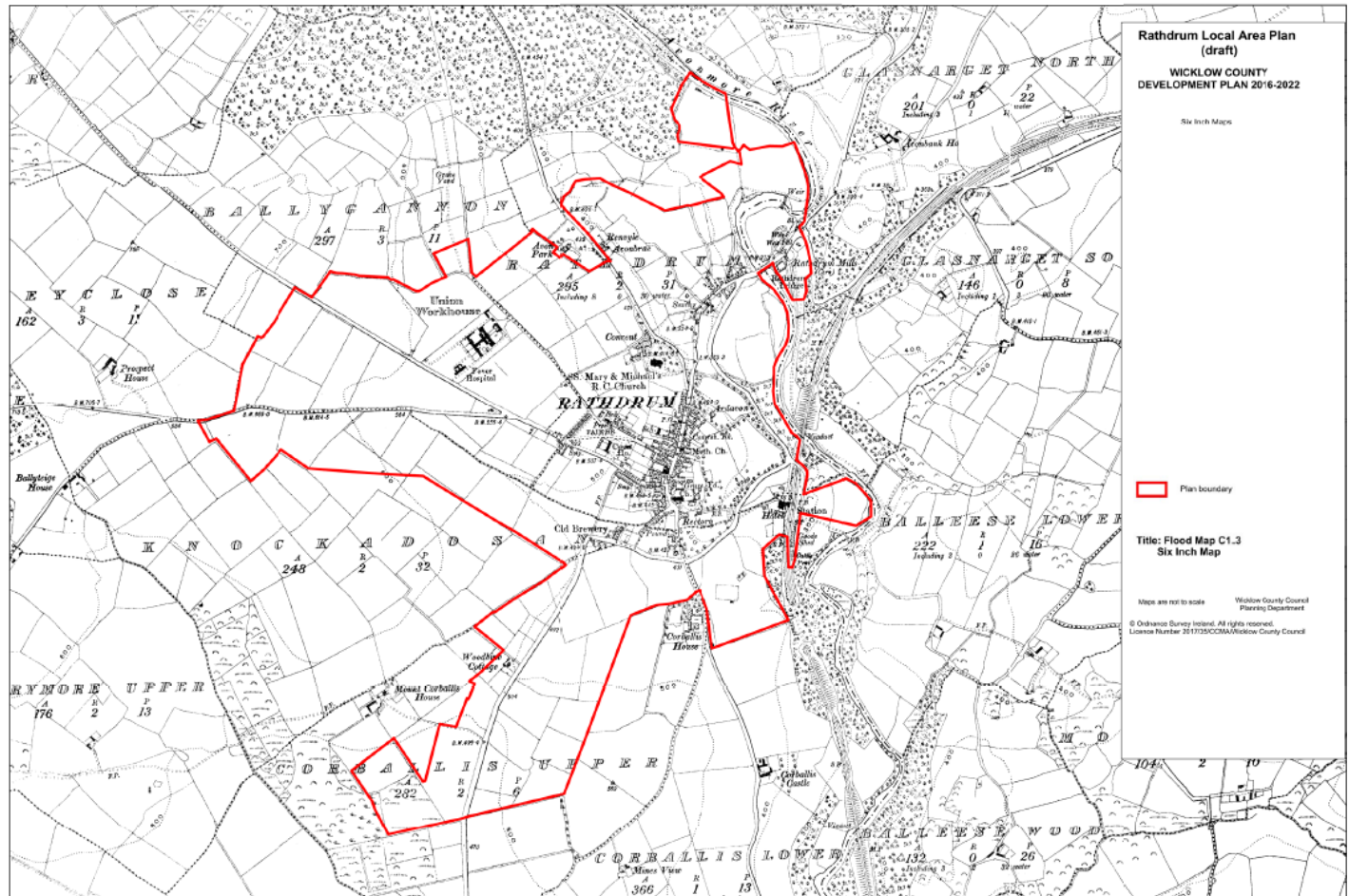
Start Date: 26/Aug/1986
 County: Wicklow
 Flood Quality Code: 2
 National Grid Reference: T 192 886

Report Type	Report Name	File Type & Size	Date	Quality Code	Description	Source of Information
Report	Rathdrum Photographs	.pdf (401Kb)	Aug/1986	2	Set of photos of aftermath of August 1986 flooding near Rathdrum Co Wicklow (Report Includes: Flood Extent, Flood Level)	Wicklow County Council
Source Meeting Minutes	Wicklow Area Engineer Meeting No. 7 - Minutes	.pdf (28Kb)	14/Nov/2005	4	Minutes of Meeting (Data Collection No. 7) identifying areas subject to flooding. - Wicklow - South East area - Arklow, Rathdrum Avoca, Redcross, Brittas (Report Includes: Cause)	Wicklow County Council
Source Meeting Minutes	Wicklow Head Office Engineer Meeting No. 1 - Minutes	.pdf (19Kb)	24/Oct/2005	4	Minutes of Meeting (Data Collection No. 1) identifying areas subject to flooding. - Wicklow (Report Includes: Source)	Wicklow County Council

Alluvial Soils



Six Inch Map



Contours

