



Strategic Flood Risk Assessment Screening of Variation No.2 of the Meath CDP 2021-2027

SFRA Report

March 2024



comhairle chontae na mí
meath county council

County Hall

Navan

Meath

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Revision History

Revision Ref / Date Issued	Amendments	Issued to
S3-P01 March 2024	SFRA of Screening of Variation No.2	Meath County Council

Contract

This report describes work commissioned by Brady Shipman Martin on behalf of Meath County Council in March 2024. Ross Bryant of JBA Consulting carried out this work.

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Purpose

This document has been prepared as an SFRA Screening for Variation No.2 of the Meath County Council Development Plan 2021-2027.

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1 Introduction

JBA Consulting was commissioned by Meath County Council (MCC) to provide assistance in the SFRA screening of Variation No.2 of the Meath County Development Plan 2021-2027 (MCDP).

1.1 SFRA Legacy in County Meath and Variation No.2

The 2021 MCDP SFRA represents an update to Variation 3 of the 2013 MCDP, and it also incorporates SFRA content from the Navan Development Plan 2013, the Trim Development Plan 2014, the Kells Development Plan 2013 and the East Meath LAP 2014.

Variation No.2 includes a Settlement Capacity Audit (SCA) that has resulted in a series of additional zoning considerations.

1.2 Terms of Reference

Under the "Planning System and Flood Risk Management" guidelines, the purpose for a Strategic Flood Risk Assessment (SFRA) is detailed as being *"to provide a broad (wide area) assessment of all types of flood risk to inform strategic land-use planning decisions. SFRAs enable the LA to undertake the sequential approach, including the Justification Test, allocate appropriate sites for development and identify how flood risk can be reduced as part of the development plan process"*.

More specifically the SFRA screening for the variation will complete the following tasks;

1. Undertake a flood risk assessment screening for the additional zoning considerations;
2. Review and update Flood Zone mapping with any more up to date sources,
3. Assist MCC in the review of the additional zoning considerations.

The additional zoning considerations contained within Variation No.2 of the MCDP 2021-2027 are summarised in Table 1-1 below.

Table 1-1 Additional Zoning Considerations - Summary

Site / Settlement	Change	SFRA Screening
A - Dunshaughlin	RA Rural Area & A2 New Residential lands to A1 Existing Residential	In Flood Zone C and site specific FRA from SHD application addresses climate change and risk appropriately.
B – Dunboyne-Clonee	RA Rural Area lands to A1 Existing Residential	In Flood Zone C, no impact from climate change and no significant issues.
C - Longwood	RA Rural Area to A1 Existing Residential	In Flood Zone C, climate change impacts are managed by the site layout design.
D - Trim	Relocation of Spot Objective TRM OBJ 16	No change to LU Zoning or Flood Zones. Manage risk in accordance with MCDP policy.
E - Navan	Rezoning from A1 Existing Residential to C1 Mixed Use at Flowerhill	In Flood Zone C, no impact from climate change and no significant issues.
F - Killeen Castle, outside Dunshaughlin	RA Rural Area to D1 Tourism with updated Objective	Flood Zone A/B impacts a small area of the south west periphery and is under water compatible use (existing golf course). Risk Managed using Sequential Approach.

Site / Settlement	Change	SFRA Screening
G - Ratoath	Extension of existing A2 Residential Lands	In Flood Zone C, no impact from climate change and no significant issues.
H - Ratoath	A1 Existing Residential and B1 Commercial Town Centre to G1 Community Infrastructure	In Flood Zone C, no impact from climate change and no significant issues.
I - Athboy	G1 Community Infrastructure to A2 Residential	In Flood Zone C, no impact from climate change and no significant issues.

1.3 Report Structure


The following Section undertakes an SFRA screening of the additional zoning considerations listed in Table 1-1. A review of climate change mapping is presented in Section

2 SFRA Screening

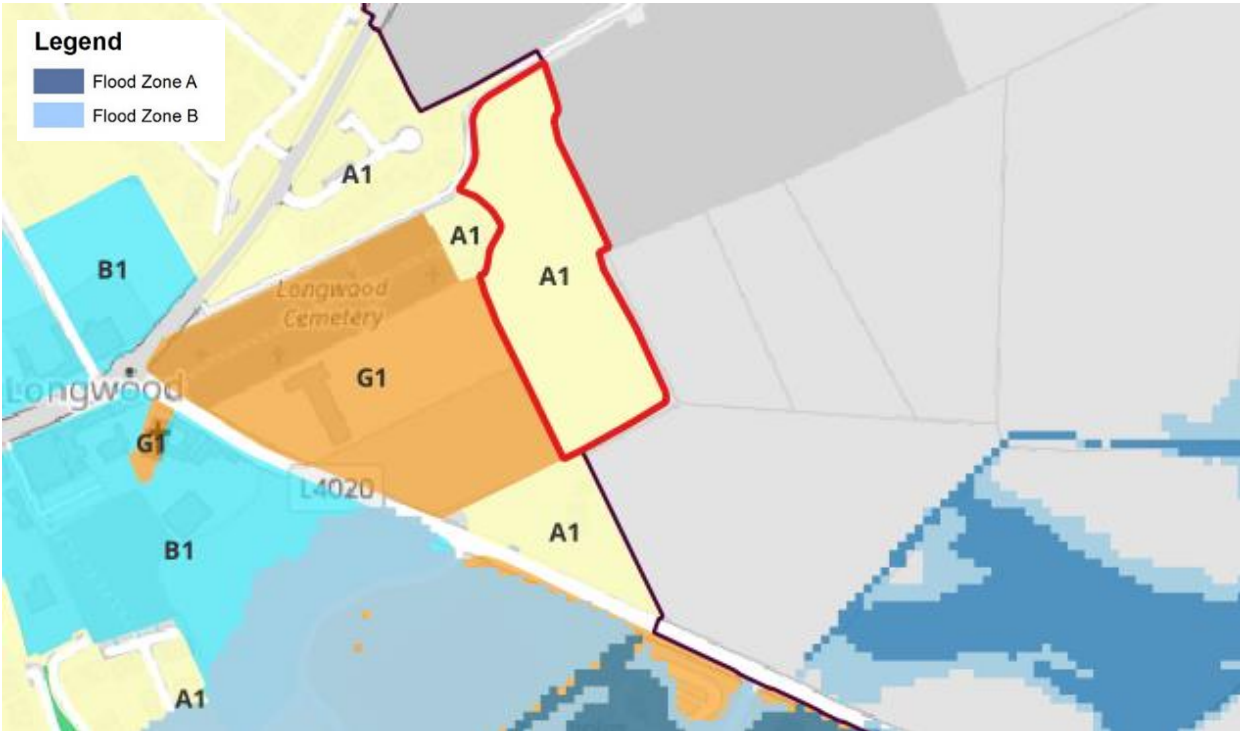
2.1 Site A- Dunshaughlin

Hierarchy		MODERATE SUSTAINABLE GROWTH TOWN
<p>Legend</p> <ul style="list-style-type: none"> Flood Zone A Flood Zone B <p>© OpenStreetMap contributors, CC-BY-SA</p> <p>The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.</p>		
Flood Zone Data	FEM FRAMS	
Historic Flooding	Flooding event occurred in November 2000 from a tributary to the River Boyne.	
Climate Change	FEM FRAMS Climate change modelling suggests that the A1 site is not impacted by fluvial Climate Change, but the extents do border the south east corner of the site.	
Conclusion	The zoning amendment proposes a change from RA Rural Area and A2 New Residential to A1 Existing Residential as outlined in the map above (lands impacted are outlined in red). This would reflect the commenced SHD planning grant on the site, Planning Reference No. SH307244. The site borders Flood Zone A/B and a site specific FRA was completed under the SHD planning application which sets out how the design appropriately manages flood risk in accordance with MCC Policy and the Planning Guidelines.	

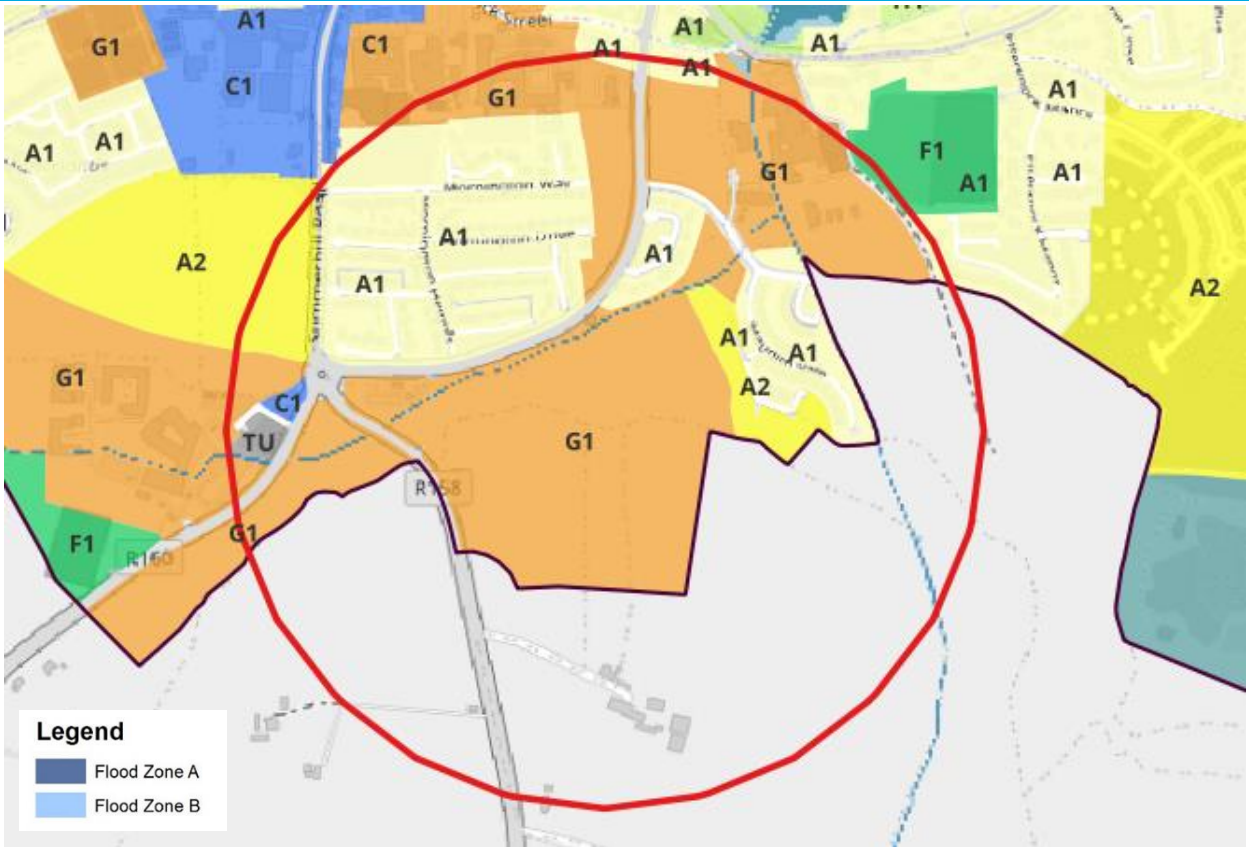
2.2 Site B – Dunboyne-Clonee

Hierarchy	LARGE GROWTH TOWN II
<div data-bbox="231 212 438 324"> <p>Legend</p> <ul style="list-style-type: none"> Flood Zone A Flood Zone B </div>  <p data-bbox="223 1086 1460 1220">© OpenStreetMap contributors, CC-BY-SA The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.</p>	
Flood Zone Data	N/A
Historic Flooding	No local flooding recorded.
Climate Change	No predicted impacts from Climate Change.
Conclusion	<p>The previous zoning was RA Rural Area and the proposed amendment to alter the zoning to A1 Existing Residential will reflect the existing residential use of the site. The site is located within Flood Zone C and is at low probability of flooding. Surface water flood risk is mitigated as per INF POL 14-17 from the MCDP.</p>

2.3 Site C - Longwood

Hierarchy		VILLAGE
 <p>© OpenStreetMap contributors, CC-BY-SA The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.</p>		
Flood Zone Data	CFRAM mapping verified on site by JBA.	
Historic Flooding	No history of flooding with the urban area of Longwood but a record of flooding recurring in the Moyvalley.	
Climate Change	Climate Change flood extents for the 0.1% AEP MRFS reach the margin of the southern boundary of the site.	
Conclusion	The proposed variation is from RA Rural Area lands to A1 Existing Residential lands. This is to reflect the commenced planning permission, TA/190892. The site is approximately 1.37 hectares, the density of this site would be 34 units. The site is located within Flood Zone C and is at low probability of flooding. However under the MRFS climate change scenario the 0.1% AEP event reaches the southern boundary of the site. Existing ground levels will be raised by >1m in the southern part of the site and as such the proposed development is not vulnerable to climate change impacts. Surface water flood risk is mitigated as per INF POL 14-17 from the MCDP.	

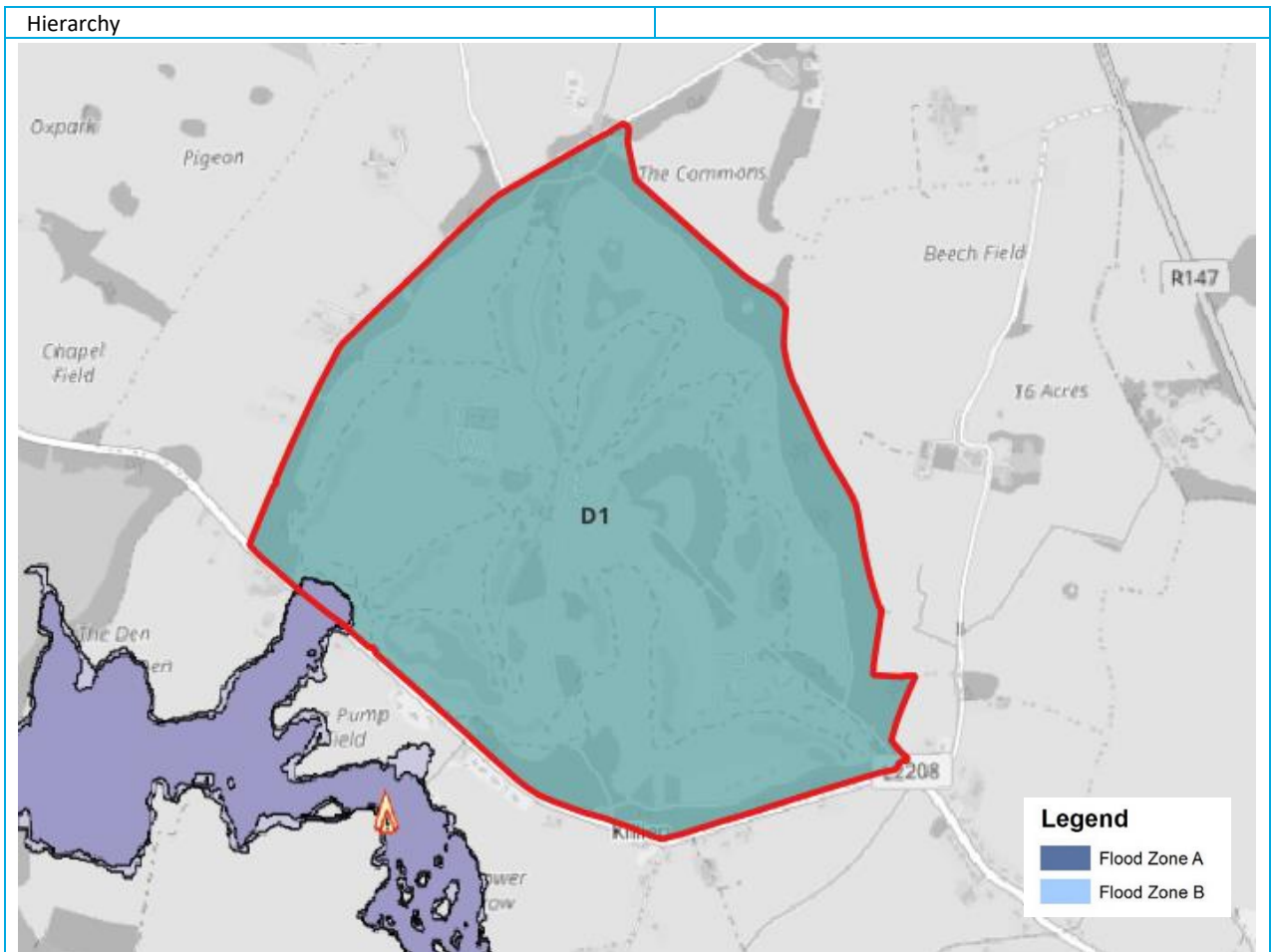
2.4 Site D - Trim

Hierarchy	MODERATE SUSTAINABLE GROWTH TOWN
 <p data-bbox="225 1041 593 1064">© OpenStreetMap contributors, CC-BY-SA</p> <p data-bbox="225 1066 1457 1167">The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.</p>	
Flood Zone Data	CFRAM, JBA site visit.
Historic Flooding	The main source of flooding in the town in the past has been the River Boyne, in the area surrounding the Spot Objective there is no historic flood risk from the local watercourses nearby.
Climate Change	There are no significant Climate Change impacts.
Conclusion	There is no change to the zoning, only the ownership of the land and the addition of the spot objective for the development of an education campus. The site is predominantly located within Flood Zone C and is at low probability of flooding, however there is a small watercourse that flows through the G1 zoning and any potential development should manage flood risk and development in line with approved policies and objectives, especially INF POL 22 which will ensure a minimum 10m boundary set back from each bank of the watercourse. Any new development should carefully consider the management of surface water flood risk through application of INF POL 14-17 from the MCDP.

2.5 Site E - Navan

Hierarchy		LARGE GROWTH TOWN 1
<p>© OpenStreetMap contributors, CC-BY-SA</p> <p>The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.</p>		
Flood Zone Data	CFRAM, JBA site visit.	
Historic Flooding	No historic flooding within or close to the zoning alteration.	
Climate Change	There are no significant Climate Change impacts.	
Conclusion	<p>The site was zoned as A1 Residential, the variation proposes to amend this to 'C1 Mixed Use' to provide for a greater range of potential uses and to assist in the regeneration of the Flowerhill area. This is in accordance with the Flowerhill Regeneration Plan (November 2021).</p> <p>The site is wholly located within Flood Zone C and is at low probability of flooding. Any development should carefully consider the management of surface water flood risk through the application of INF POL 14-17 from the MCDP.</p>	

2.6 Site F – Killeen Castle, near Dunshaughlin



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The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.

Flood Zone Data	NIFM.
Historic Flooding	No historic flooding noted on the Skane River to the south of the site.
Climate Change	The flood extents from the Skane River are not significantly impacted by Climate Change at this location..
Conclusion	<p>The proposed site is located within the grounds of Killeen Castle, outside Dunshaughlin and contains a golf course, clubhouse and permitted hotel. Variation 2 proposes to zone the lands as D1 Tourism and amend the following policy; ED POL 59</p> <p><i>To promote the historic demesne at Killeen Castle Estate as a high-quality integrated tourism product of National significance bearing in mind the unique historic, cultural and architectural importance of the lands and its success to date in hosting International sporting events and its further potential as an integrated tourism destination centred on a premium Hotel along with facilitating the completion of the remaining residential units originally permitted.</i></p> <p>Flood Zone A/B from the Skane River encroaches on a very small section of the south west corner of the existing golf course. The remainder of the site is in Flood Zone C and at low probability of flooding. Development within Flood Zone A/B must not include any highly vulnerable use (eg Hotel or Residential) and no less vulnerable use is permitted in Flood Zone B. The current golf course use would be considered water compatible and the Justification Test does not apply. The Flood Zones do not prevent access to the site. Any further development in Flood Zone C should carefully consider the management of surface water flood risk carefully through application of INF POL 14-17 from the MCDP.</p>


2.7 Site G – Ratoath

Hierarchy	SMALL TOWN
<p>The map displays a site area outlined in red, situated in Ratoath. The site is primarily zoned A2 and is located adjacent to the Ratoath Outer Relief Road (RORR) design boundary. Surrounding areas include zoning codes A1, G1, and E2. Key landmarks like Ratoath College and Glascairn Lane are visible. A legend in the bottom right corner identifies Flood Zone A (dark blue) and Flood Zone B (light blue).</p>	
<p>© OpenStreetMap contributors, CC-BY-SA</p>	
<p>The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.</p>	
Flood Zone Data	N/A
Historic Flooding	No recorded flood history in the area.
Climate Change	N/A
Conclusion	<p>The lands are located adjacent to the Ratoath Outer Relief Road (RORR) design boundary. This will extend the boundary of the current A2 zoning to the Ratoath Outer Relief Road (RORR) design boundary and allow for an active frontage onto same. All lands are in Flood Zone C and at low probability of flooding.</p> <p>Manage flood risk and development in line with approved policies and objectives. Consider the management of surface water flood risk carefully, apply INF POL 14-17 from the MCDP.</p>

2.8 Site H – Ratoath

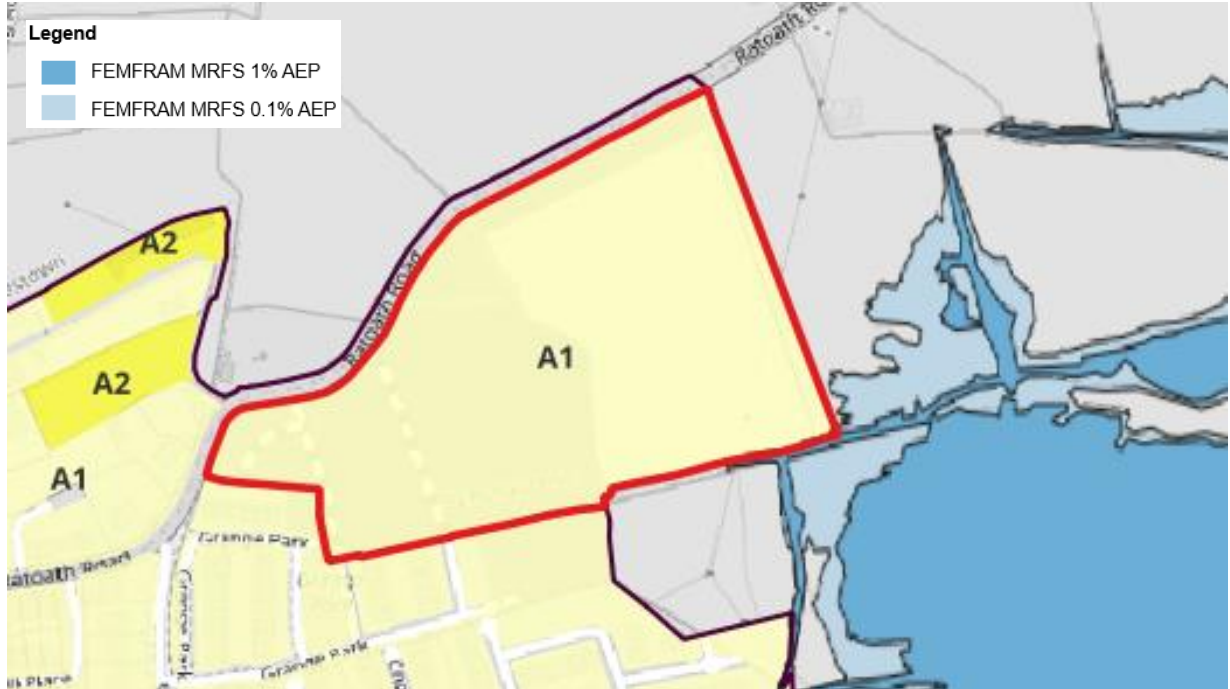
Hierarchy	SMALL TOWN
<p data-bbox="225 987 592 1010">© OpenStreetMap contributors, CC-BY-SA</p> <p data-bbox="225 1014 1457 1115">The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.</p>	
Flood Zone Data	N/A
Historic Flooding	No recorded flood history in the area.
Climate Change	N/A
Conclusion	<p data-bbox="557 1234 1437 1319">The variation proposes to rezone the site displayed in the map above from A1 Existing Residential and B1 Town and Village Centre to G1 Community Infrastructure. All lands are in Flood Zone C and at low probability of flooding.</p> <p data-bbox="557 1352 1437 1433">Manage flood risk and development in line with approved policies and objectives. Consider the management of surface water flood risk carefully, apply INF POL 14-17 from the MCDP.</p>

2.9 Site I – Athboy

Hierarchy		SMALL TOWN
		
<p>© OpenStreetMap contributors, CC-BY-SA</p> <p>The Flood Zone mapping has been produced in accordance with the Planning Guidelines and therefore ignores the impact of flood protection structures. Areas protected by flood defences still carry a residual risk of flooding due to overtopping or breach, there may also be no guarantee of maintenance in perpetuity. Areas that benefit from defences are annotated separately. Flood Zone A – Fluvial: 1 in 100 year or 1% AEP, Tidal: 1 in 200 year or 0.5% AEP. Flood Zone B – 1 in 1000 year or 0.1% AEP.</p>		
Flood Zone Data	N/A	
Historic Flooding	No recorded historic flooding nearby.	
Climate Change	N/A	
Conclusion	<p>The variation proposes to rezone the current G1 Community Infrastructure zoning to A2 New Residential which will extend the adjoining A2 zoning to align with the natural field boundary. All lands are in Flood Zone C and at low probability of flooding.</p> <p>Manage flood risk and development in line with approved policies and objectives. Consider the management of surface water flood risk carefully, apply INF POL 14-17 from the MCDP to ensure any new development or redevelopment appropriately manages the risk of surface water flooding.</p>	

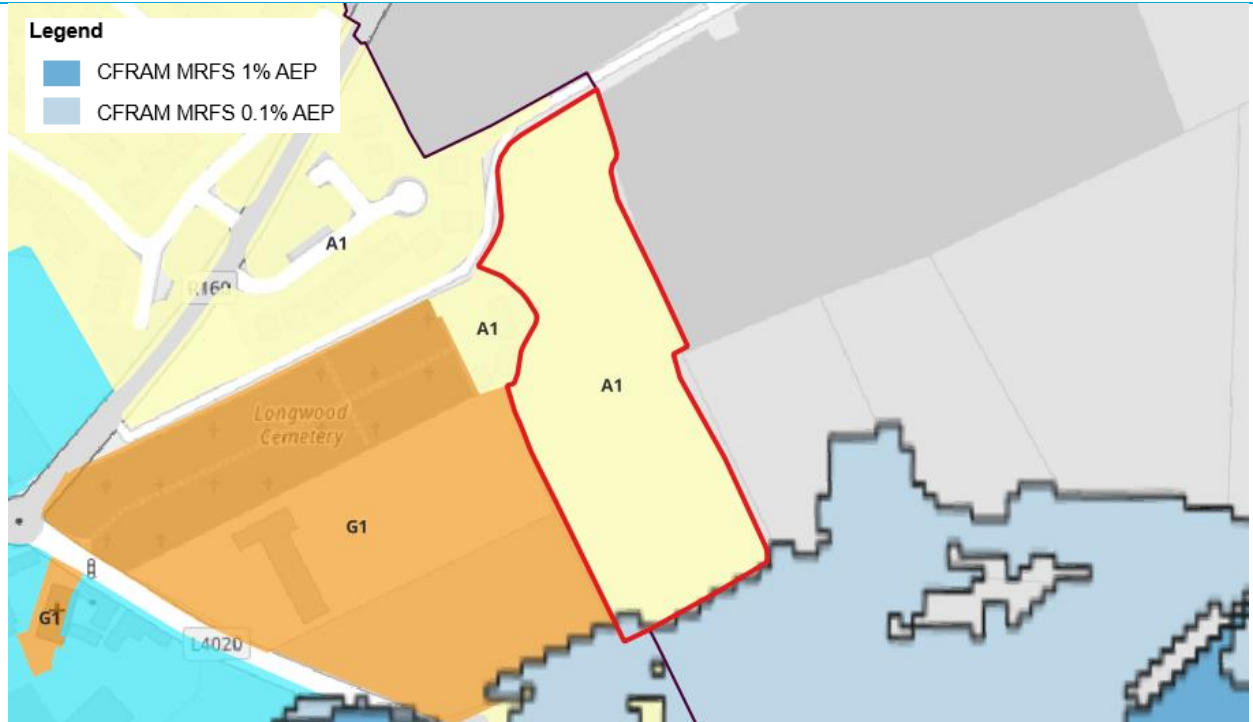
3 Climate Change Mapping

Site A - Dunshaughlin



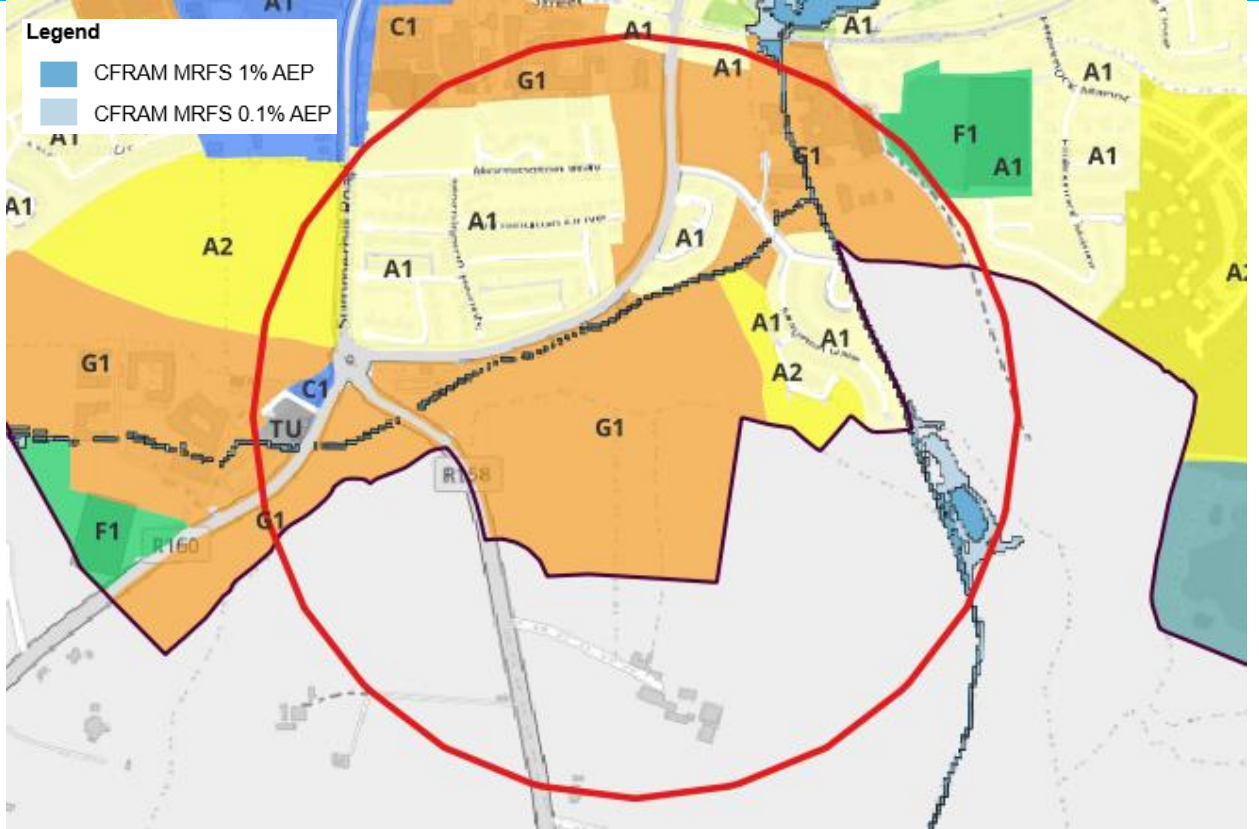
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Site C - Longwood



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Site D - Trim



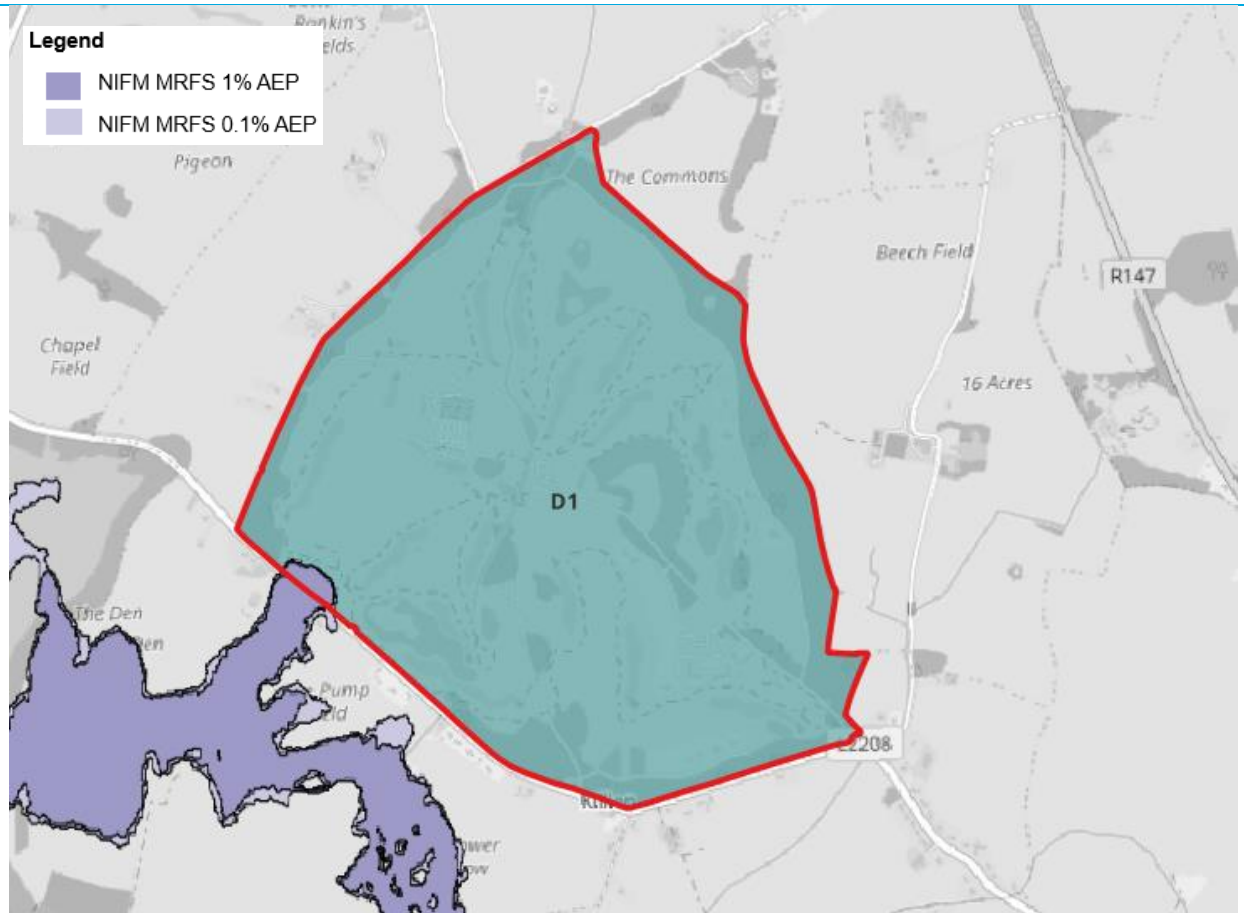
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Site E - Navan



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Site F – Killeen Castle



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