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STRUCTURAL ENGINEERING  
DESIGN

CIVIL ENGINEERING DESIGN

CONSERVATION ENGINEERING  
DESIGN

SITE DEVELOPMENT DESIGN

CONTRACT ADMINISTRATION

## **LEVEL 1/2 SITE SPECIFIC FLOOD RISK ASSESSMENT**

**FOR  
LANESBOROUGH OUTDOOR THEATRE  
COMMONS NORTH  
CO. LONGFORD**

# **DRAFT 3**

**MAY 2025**

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## **FLOODING AND FLOOD RISK ASSESSMENT**

### **1.0 INTRODUCTION**

Flood risk is a combination of the likelihood of flooding and the potential consequences arising. The Planning System and Flood Risk Management Guidelines for Planning Authorities recommend a staged approach to flood risk assessment covers both the likelihood of flooding and the potential consequences.

There are two components of flood risk that must be considered in applying this guidance in a consistent manner:

- Likelihood of flooding is normally defined as the percentage probability of a flood of a given magnitude or severity occurring or being exceeded in any given year.
- Consequences of flooding depend on the hazards associated with the flooding (e.g. depth of water, speed of flow, rate of onset, duration, wave-action effects, water quality), and the vulnerability of people, property and the environment potentially affected by a flood (e.g. the age profile of the population, the type of development, presence and reliability of mitigation measures etc).

Flood risk is then normally expressed in terms of the following relationship: Flood risk = Likelihood of flooding x Consequences of flooding.

Flood zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning. There are three types or levels of flood zones defined in the Planning System and Flood Risk Management Guidelines for Planning Authorities:

**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); and

**Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all areas of the plan which are not in zones A or B.

For sites within Flood Zone A or B, a site specific "Stage 2 - Initial FRA" will be required and may need to be developed into a "Stage 3 - Detailed FRA". The extents of Flood Zone A and B are delineated through a SFRA.

A Site-Specific Flood Risk Assessment (Site FRA) is undertaken to assess all types of flood risk for a new development. This requires identification of the sources of

flood risk, the effects of climate change on the flood risk, the impact of the proposed development, the effectiveness of flood mitigation and management measures and the residual risks that then remain.

A Site Specific Flood Risk Assessments is categorised into three levels.

### **FRA Level 1 - Flood Risk Identification**

Investigation and report to assess any flooding or surface water issues which may require further investigation or confirm that the site is at low risk of flooding from all sources. This assessment will provide an early stage recommendation for the rest of the assessment. This allows developers to make an informed decision by balancing flood risk and impacts on the development.

### **FRA Level 2 - Initial Flood Risk Assessment**

This assessment builds on Level 1, and includes:

- Appraisal of the availability and adequacy of existing flood risk information.
- Qualitative appraisal of flood risk posed to the site and the potential impacts the development will have on flood risk elsewhere.
- Production of an FRA including possible flood risk mitigation measures to reduce flood risk to acceptable levels.

### **FRA Level 3 - Detailed Flood Risk Assessment**

This assessment is only undertaken if the previous stages determine the need for quantitative analysis to assess flood risk issues relating to the development site. This assessment may include;

- Topographic survey of the channel and surrounding ground levels,
- Hydrological assessment of the catchment by specialists,
- Hydraulic calculations and modelling to quantify the flood risk to the site, assessment any offsite flood risk impacts,
- Considerations of existing and proposed surface water drainage arrangements and
- Determination of appropriate flood risk mitigation measures.



## **2.0 DESCRIPTION OF THE SITE AND THE PROPOSED DEVELOPMENT**

The proposed site has an area of approximately 6200m<sup>2</sup>. It's located on the outskirts of Lanesborough, within an old quarry site in an area of mixed woodland on the shore of Lough Ree. The surrounding landscape to the north and west is a mixture of semi-rural, residential, and agricultural land; to the south lies an area of deciduous woodland composed mostly of ash and hazel.

In the 2021-2027 Longford Development Plan, the site is zoned as Protected Area/Passive Amenity.

The proposed development is for an outdoor concert venue set in the former lime quarry. It will comprise:

- Permanent tiered seating (500 seats)
- Stage with canvas canopy and steel support structure.
- Temporary public 'porta-loos' including 1 no. accessible 'porta-loo'.
- 1 no. 20 foot container (14 sqm) modified for equipment storage.
- 1 no. 20 foot container (14 sqm) modified to contain function services (temporary bar, first aid).
- 1 no. Sound booth (7 sqm).
- Site lighting.
- Associated landscaping and ancillary site works.

Under the Planning System and Flood Risk Management Guidelines, the proposed development is classed as 'Less Vulnerable Development'

### **3.0 FLOOD RISK ASSESSMENT**

#### **3.1 Level 1: Flood Risk Identification**

Flood Risk Identification is the process for deciding whether a plan or project requires a Level 2 FRA. It is essentially a desk study based on sources of existing information. At the preliminary stage a study was carried out to develop an understanding of the flood conditions on the site, to identify available information about the flood risk and to assess the likely probability and suitability of the site in flood risk terms. This was achieved by.

- a. Identification of possible flooding sources and mechanisms.
- b. Identification and review of existing information relating to previous flood events.

#### **a) Identification of possible flooding sources and mechanisms**

The principal sources for flooding are rainfall or higher than normal sea levels. The principal pathways are rivers, drains, sewers, overland flow and river and coastal floodplains. Fluvial Flooding occurs due the rise in water levels from a river or other watercourses, Tidal Flooding occurs when the areas around the sea are inundated with seawater during a storm surge and Pluvial Flooding occurs as a result of rainfall-generated overland flow and includes overflowing drainage systems.

The main possible sources of fluvial flooding identified for this site is Lough Ree, located to the west of the site and the River Shannon located to the northwest of the site.

As the site is in the midlands of Ireland and Tidal Flooding therefore not an issue or contributing factor.

The main possible sources of pluvial flooding are existing foul, and storm drains located on Rathcline to the west of the site.

#### **b) Identification and review of existing information relating to previous flood events**

A range of sources were consulted for this study. These include.

- i. OPW Flood Hazard Maps on [www.floodmaps.ie](http://www.floodmaps.ie) and Past Flood Events.
  - ii. Local Authority records / Past Flood Events
  - iii. Longford CDP 2021-2027
  - iv. Geological Survey Ireland (GSI) winter 2015/2016 Surface Water Flooding Maps
  - v. GSI Maps – Maximum Historic Groundwater Flooding
- 
- i. The OPW Flood Hazard Maps do not record any flooding events in the vicinity of the site. The Past Flood Events mapping is included in Appendix B1
  - ii. Photographs of the 2009 flood event were sourced from the Local Authority. Unfortunately, none of these photos included the proposed site.
  - iii. The Longford CDP 2021-2027 Historical Indicators Maps indicate past flooding to the west of the site. Refer to Appendix B2.

- iv. The Geological Survey of Ireland (GSI) maps were developed as part of the 2016-2019 GW Flood project in collaboration with Trinity College Dublin and the Institute of Technology Carlow.  
The Winter 2015/2016 Surface Water Flooding map shows fluvial (rivers) and pluvial (rain) floods, excluding urban areas, during the winter 2015/2016 flood event, and was developed as a by-product of the historic groundwater flood map. These maps do not show any flooding on the site. Refer to Appendix B3.
- v. The GSI Maps Maximum Historic Groundwater Flooding maps do not show any flooding in the vicinity of the site.

### **3.2 Level 2: Initial Flood Risk Assessment**

As the Level 1 FRA identified evidence of flooding adjacent to the site (Longford CDP 2021-2027 Historical Indicators Maps), a Level 2 FRA was carried out. This included,

- a) Identification and review of any previous modelling studies.
- b) Qualitative assessment of the risk of flooding to the site.
- c) Qualitative assessment of the potential impact of a development on flood risk on the site and elsewhere.

#### **a) Identification and review of previous modelling studies.**

A range of sources were consulted for this study. These include

- i. OPW National Preliminary Flood Risk Assessment and CFRAM Study
- ii. The National Indicative Fluvial Maps
- iii. Longford CDP 2021-2027
- iv. Longford Strategic Flood Risk Assessment for the Longford 2015-2021 Draft CDP
- i. The OPW Catchment Flood Risk Assessment Management Study (CFRAMS) maps do not extend to the proposed site. The maps are limited to the north of the site as shown on CFRAMS Flood Maps in Appendix C1. However, the CFRAMS online flood maps on floodinfo.ie do show the Flood Extent on the site for the Present Day, Mid-Range Future Scenario and High-End Future Scenario for all probabilities. These are presented in Appendix C2, C3 and C4.  
The Mid-Range Future Scenario extents were generated taking in the potential effects of climate change using an increase in rainfall of 20% and sea level rise of 500mm (20 inches). The High-End Future Scenario extents were generated taking into account the potential effects of climate change using an increase in rainfall of 30% and sea level rise of 1,000 mm (40 inches)  
The Present Day maps show the site in Flood Zone B while the Mid Range and High End maps indicate flooding on the site for the Medium (1:100 year) and Low (1:1000 year) probability for both present day and future scenarios. These maps would classify the site to be within Flood Zone A.
- ii. The National Indicative Fluvial Maps (NIFM) have been produced for catchments greater than 5km<sup>2</sup> in areas for which flood maps were not produced under the National CFRAM Programme and should be read in this context. River reaches that have been modelled are indicated by the NIFM Modelled River Centrelines dataset. Floodinfo.ie include indicative maps for Present Day Scenario, the Mid-Range

Future Scenario and High End Future Scenario. All these scenarios include medium probability (100 year return period) and low probability 1000 year return period). The Present-Day Scenario data was generated using methodologies based on historic flood data, without taking account of potential changes due to climate change. The potential effects of climate change have been separately modelled and reported on. The Mid-Range Future Scenario extents were generated taking in the potential effects of climate change using an increase in rainfall of 20% while the High-End Future Scenario extents were generated taking an increase in rainfall of 30%.

Extracts from these maps are presented in Appendix C5. These maps do not show any flooding on the site.

It must be noted that the National Indicative Fluvial Maps should not be used to assess the flood risk associated with individual properties or point locations, or to replace a detailed site-specific flood risk assessment.

- iii. The Longford CDP 2021-2027 includes predictive flood maps for the county. Appendix C6 shows an extract of the maps for the Lanesborough area. The Predictive Indicators map show the site within Flood Zone B. These maps are based on a Preliminary Flood Risk Assessment data supplied by Longford County Council.
- iv. The Longford SFRA Assessment for 2015-2021 LCP includes indicative flood maps for Lanesborough. This map shows a portion of the western end of the site in Flood Zone B. Refer to Appendix C7.

**b) Qualitative assessment of the risk of flooding to the site;**

From the historical data observed in a) above, it is deemed that the site is not susceptible to flooding.

From examination of previous flooding modelling, it is expected that the site could be within Flood Zone A.

Table 3.1 below summarises the risk of flooding with commentary on measures to reduce risk and outlines the residual risks.

**c) Qualitative assessment of the potential impact of a development on flood risk.**

From all the data collected, the site is concluded to be within Flood Zone A.

Table 3.1 below summarises the risk of flooding with commentary.

Flood risk	Applicable to subject site	Measures to reduce risk /	Residual risk
Fluvial	Yes	The proposed development is an outdoor venue. The drainage is to be designed with no additional surface water run-off to watercourse. Rainfall will be contained within the site. In the event of an unexpected flash flood during an event, a local alarm system is to be installed.	Minimal
Pluvial	Not known or expected	All surface water to be handled on site. No underground drainage.	N/A.
Coastal	No	N/A	N/A
Groundwater	Not expected	Monitor groundwater levels. Avoid basements.	Rising Ground Water Levels.
Dam/Embankment /Canal bank breach	Not known or expected	N/A	N/A
Network drainage	No.	No existing network on site.	N/A
Snow melt	Yes	As an outdoor venue, No changes to the current scenario.	N/A
Watermain burst	No	No watermains on or in the vicinity of the site	N/A

#### 4.0 JUSTIFICATION TEST

In accordance with Planning System and Flood Risk Management Guidelines, the proposed development is classed as 'Less Vulnerable Development'. As the site is within Flood Zone A, the 'Justification Test' needs to be applied in accordance with the guidelines. The test is comprised of two processes.

1. The first is the Plan-making Justification Test and used at the plan preparation and adoption stage where it is intended to zone or otherwise designate land which is at moderate or high risk of flooding. This test was carried out as part of the Longford CDP 2021-2027. The land use zoning for this site is for '**Protected Area/Passive Amenity**'.
- 2.
3. The second is the Development Management Justification Test. This is used at the planning application stage where it is intended to develop land at moderate or high risk of flooding for uses or development vulnerable to flooding that would generally be inappropriate for that land.

Prepared in line with the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), this Justification Test is submitted to support development in Flood Zone A.

- A. The urban settlement is targeted for growth under the National Planning Framework, regional spatial and economic strategies, statutory plans or core strategy.

The site is zoned as Protected Area/Passive Amenity under the Longford County Development Plan 2021–2027, which was subject to a Strategic Flood Risk Assessment (SFRA) during its preparation. The zoning reflects a strategic intent to enhance community, environmental and recreational value in this location. The project supports cultural and tourism-based development, aligning with regional goals for sustainable rural regeneration and amenity enhancement.

- B. The site is suitable for the type of development proposed, taking account of flood risk, the nature of the flood hazard and the probability of flooding.

While CFRAM and related data classify the site within Flood Zone A, the proposed development is categorised as 'Less Vulnerable Development', consisting of an outdoor venue with no habitable enclosed buildings. Based on a qualitative review of multiple flood mapping sources:

- No direct historic flood events are recorded on the site
- Development will be limited to open-air infrastructure and low-risk temporary or modular structures
- Minimal risk is posed to life or property due to the nature and use of the proposed site

- C. The development includes measures to minimise flood risk to people, property, the economy and the environment as far as reasonably possible

As the site is designated to be within Flood Zone A, the potential displacement of floodwaters associated with the proposed development was considered.

The site is adjacent to Lough Ree, which has an approximate surface area of 105 km<sup>2</sup>. During an extreme fluvial event, any floodwater entering the proposed site will be hydraulically connected to Lough Ree. Based on the scale of the lake relative to the footprint of the proposed earth berm surrounding the outdoor theatre, any volumetric displacement of floodwater would result in a negligible increase in lake water levels, even in extreme flood events. By way of illustration, a displaced volume on the order of 1,000–2,000m<sup>3</sup> would equate to an incremental rise of less than approximately 0.02mm across the surface area of Lough Ree. The development is therefore unlikely to have any material impact on flood risk either locally or downstream.

## **5.0 CONCLUSION**

Although the site lies within Flood Zone A, the proposed outdoor theatre is consistent with local planning objectives, falls within the 'Less Vulnerable' category of land use, and will not significantly increase flood risk on or off site. It meets all three criteria of the Development Management Justification Test and should therefore be deemed appropriate in accordance with national flood risk policy.

Furthermore, the development will be designed to ensure that it does not exacerbate flooding risk downstream. Surface water runoff from the site will be managed within the site boundaries, with no additional discharge to existing watercourses. Additionally, any potential floodwater displacement resulting from minor land-forming or the installation of site infrastructure will have a negligible volumetric impact when compared with the capacity of Lough Ree. As such, the development is not expected to give rise to any negative or adverse effects on downstream flood risk or local hydrological conditions.

Flood risk management will be reviewed at detailed design stages to ensure the best practice drainage measures are implemented throughout the lifetime of the development.

It is also worth noting that, given its nature as an open-air venue, the theatre is unlikely to be in use during periods of adverse weather—particularly in the event of heavy rainfall or flooding. In this way, the venue's very function of the venue acts as its own risk mitigation.

There is a flood alert system in place for Lough Ree and the River Shannon catchment, although it's not a real-time public alarm system in the conventional sense (like sirens or SMS alerts). Instead, it typically involves forecasts and alerts:

For major flood events, OPW and Met Éireann issue flood warnings via National and local media, Local authorities (e.g., Longford County Council) and alerts to emergency services and affected stakeholders. For the proposed development,

It must be considered to install a private water-level monitoring system on the site (e.g., remote sensors or radar gauges). These are to be linked to automatic alerts by SMS or email for site managers in the event of an unexpected rising of water levels during an event.



**APPENDIX A1**  
**SITE LOCATION MAP**



**APPENDIX B1**  
**PAST FLOOD EVENTS**  
**OPW ONLINE MAPS**



**Figure B1: OPW Past Flood Event Extents**

# Past Flood Event Local Area Summary Report

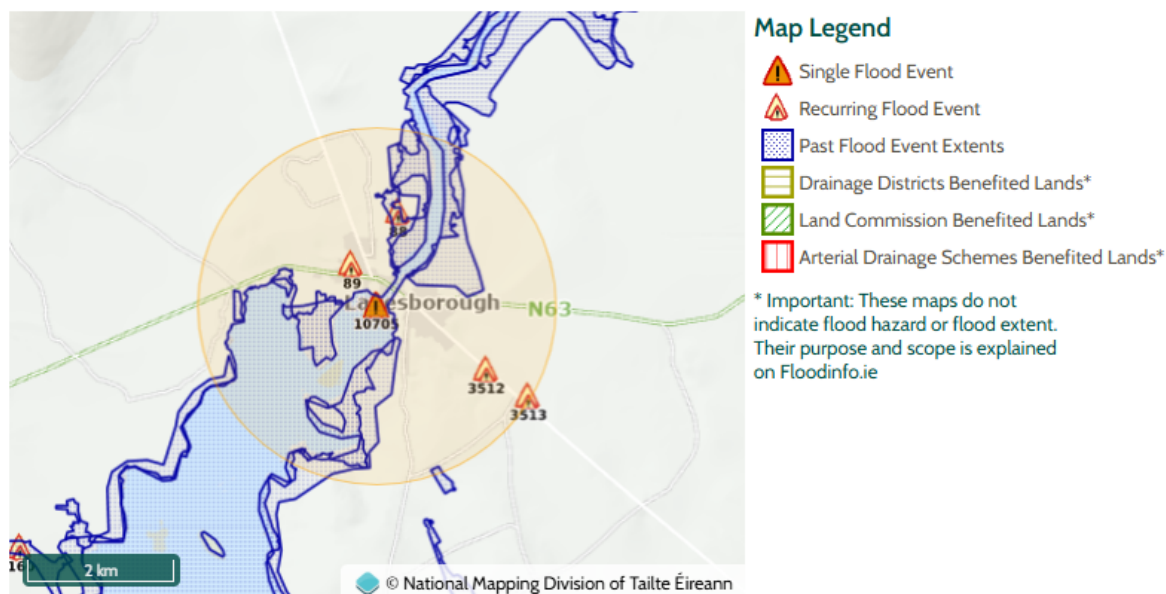


**OPW** Óifig na nOibríochtaí Poiblí  
Office of Public Works

Report Produced: 12/6/2025 15:09

This Past Flood Event Summary Report summarises all past flood events within 2.5 kilometres of the map centre.

This report has been downloaded from [www.floodinfo.ie](http://www.floodinfo.ie) (the "Website"). The users should take account of the restrictions and limitations relating to the content and use of the Website that are explained in the Terms and Conditions. It is a condition of use of the Website that you agree to be bound by the disclaimer and other terms and conditions set out on the Website and to the privacy policy on the Website.



## 8 Results

	Name (Flood_ID)	Start Date	Event Location
1.	Shannon Winter 1999/2000 (ID-2) Additional Information: <a href="#">Reports (26)</a> <a href="#">Press Archive (19)</a>	30/11/1999	Area
2.	Shannon December 1954 (ID-3) Additional Information: <a href="#">Reports (4)</a> <a href="#">Press Archive (16)</a>	01/12/1954	Area
3.	Newtowncashel County Longford March 1995 (ID-1254) Additional Information: <a href="#">Reports (2)</a> <a href="#">Press Archive (0)</a>	18/03/1995	Area
4.	Shannon Lanesborough recurring (ID-88) Additional Information: <a href="#">Reports (1)</a> <a href="#">Press Archive (0)</a>	n/a	Approximate Point
5.	Shannon Lanesborough Heights recurring (ID-89) Additional Information: <a href="#">Reports (1)</a> <a href="#">Press Archive (2)</a>	n/a	Approximate Point
6.	Gorteengar Recurring (ID-3512) Additional Information: <a href="#">Reports (1)</a> <a href="#">Press Archive (0)</a>	n/a	Approximate Point

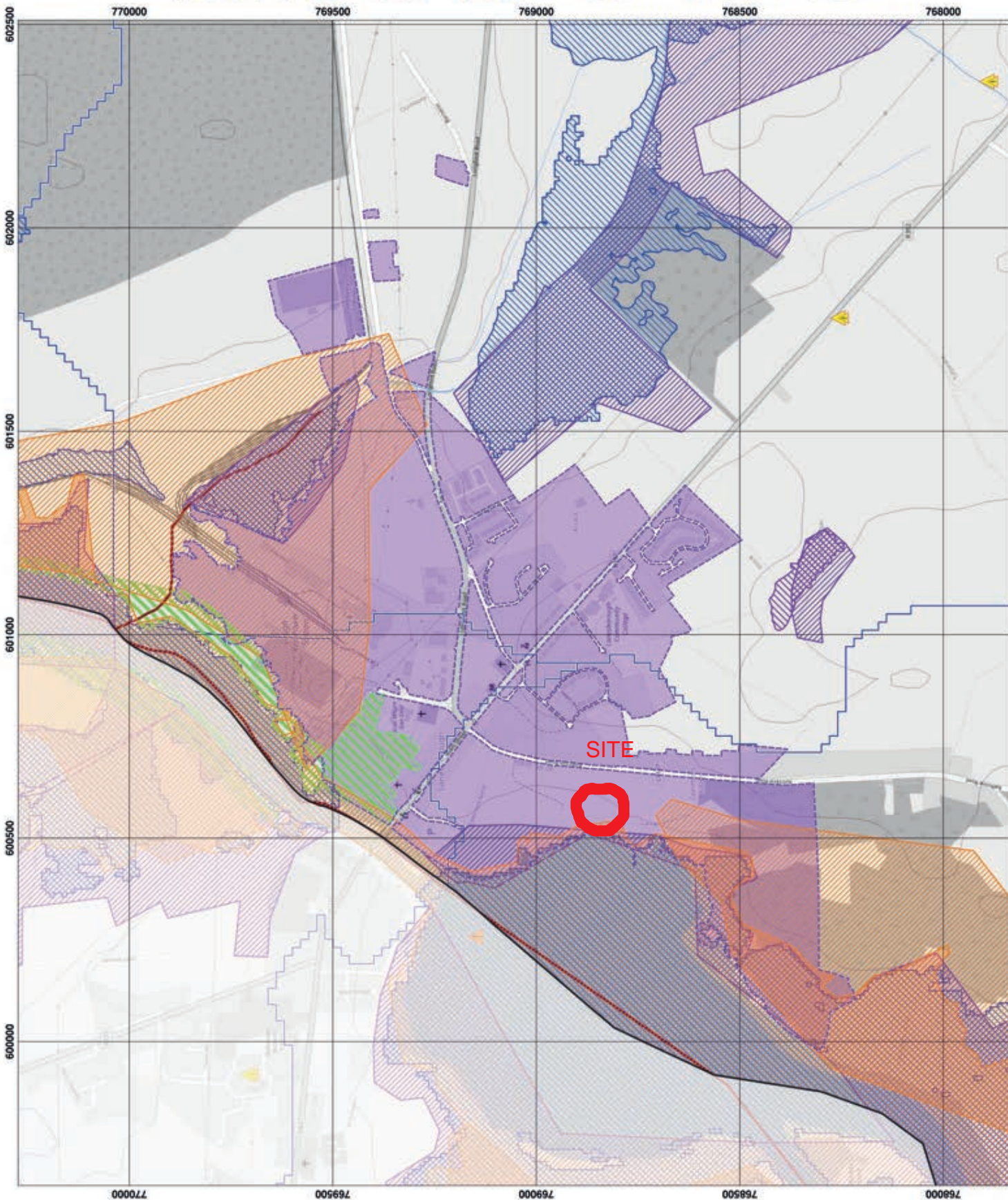
**APPENDIX B2**  
**EXTRACT FROM LONGFORD CDP 2021-2027**  
**HISTORICAL INDICATORS MAP**



# Longford CDP 2021-2027

## Lanesborough Historical Indicators

- Zoned Lands
- Rivers & Streams
- Lakes
- WFD River Sub Basins
- Arterial Drainage Schemes (ADS)
  - ADS Channel
  - ADS Embankment
  - ADS Benefitted Land
- Drainage Districts (DD)
  - DD Channel
  - DD Embankment
  - DD Benefitted Land
- Land Commission (LC)
  - LC Watercourse
  - LC Embankment
  - LC Benefitted Land
- OPW Past Flood Data
  - Single Flood Event
  - Recurring Flood Event
  - OPW Past Flood Extent
- Flooding Region - Provided by Longford County Council with PFRA Data
- Soils
  - Alluvial Soils
- GSI Groundwater Flood Mapping
  - Winter 2015-2016 Surface Water Flooding
- Maximum Historic Groundwater Flooding
  - Groundwater
  - Groundwater/Surface water



**APPENDIX B3**  
**GEOLOGICAL SURVEY IRELAND (GSI) MAPS**  
**EXTRACT FROM**  
**2015/2016 SURFACE WATER FLOOD MAPS**



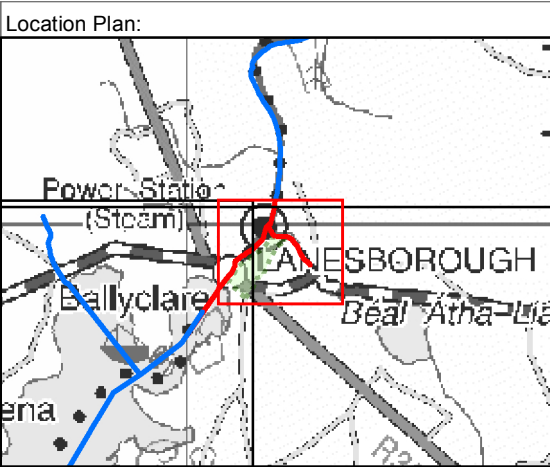
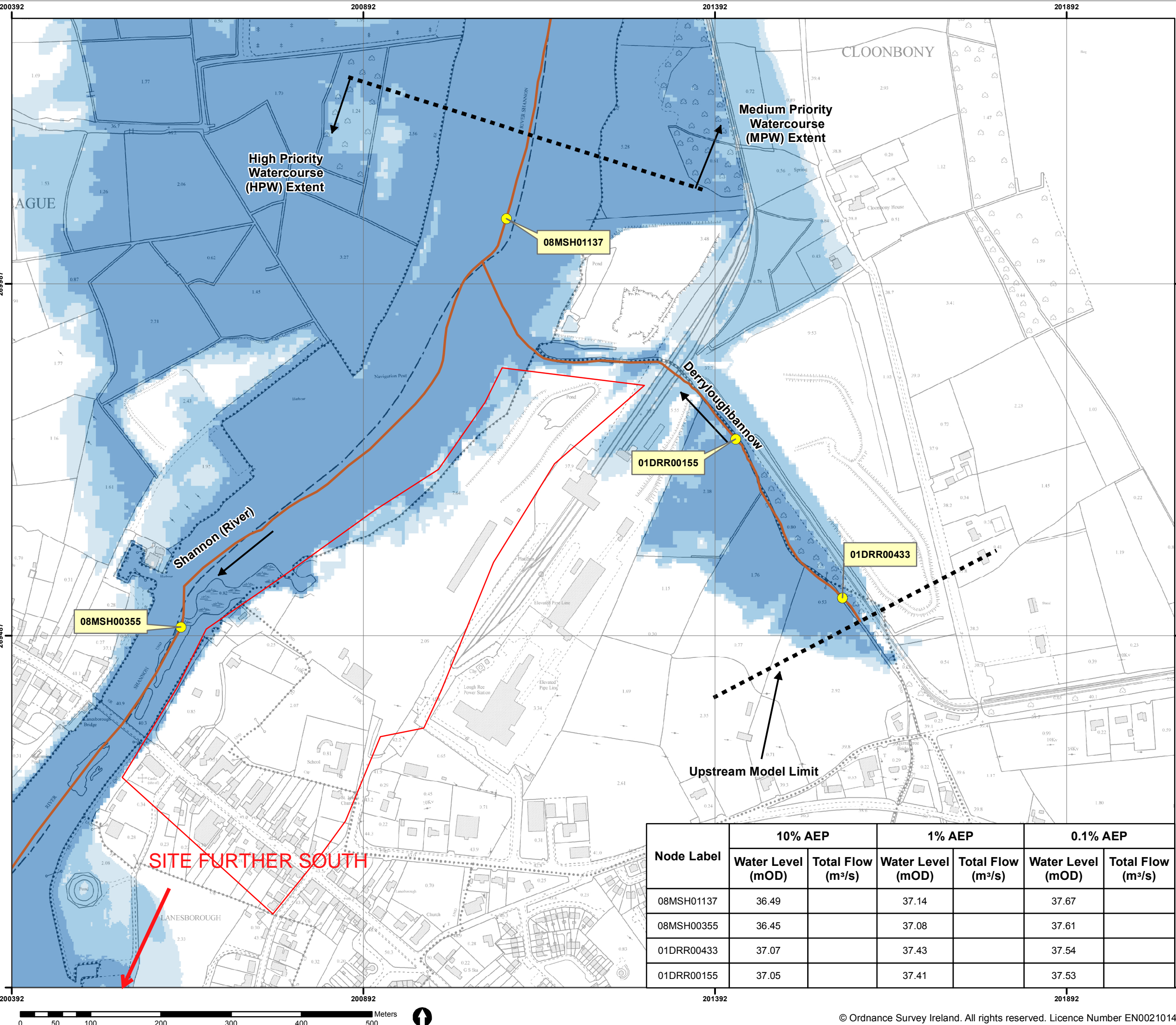


**Figure B3: GSI ONLINE MAPS – 2015/2016 SURFACE WATER FLOOD MAPS**

## **APPENDIX C1**

### **Catchment Flood Risk Assessment Management Study (CFRAMS)**

#### **FLOOD MAPS PRINTABLE**



Legend:

- Nodes
- Model Reach
- AFA Boundary
- Flood Defence: Wall
- Flood Defence: Embankment
- Defended Area

**10% AEP Fluvial Flood Extent**  
(1 in 10 chance in any given year)

**1% AEP Fluvial Flood Extent**  
(1 in 100 chance in any given year)

**0.1% AEP Fluvial Flood Extent**  
(1 in 1000 chance in any given year)

**IMPORTANT USER NOTE:**  
THE VIEWER OF THIS MAP SHOULD REFER TO THE DISCLAIMER, GUIDANCE NOTES AND CONDITIONS OF USE THAT ACCOMPANY THIS MAP.



The Office of Public Works  
Jonathan Swift Street  
Trim  
Co. Meath  
C15 NX36



Merrion House  
Merrion Road  
Dublin 4  
D04 R2C5

Project:	SHANNON CFRAM STUDY		
Map Type:	EXTENT		
Source:	FLUVIAL		
Area:	LANESBOROUGH		
Scenario:	EXISTING		
Drawn by: EF	Date: JUNE 2016		
Checked by: AC	Date: JUNE 2016		
Reviewed by: MC	Date: JUNE 2016		
Approved by: PS	Date: JUNE 2016		
Map Number:	S2526LAH_EXFCD_F1_01		
Sheet: 1 of 7	Revision: 0		
Map Scale: 1: 5000	Plot Scale: 1:1 @ A3		

Node Label	10% AEP		1% AEP		0.1% AEP	
	Water Level (mOD)	Total Flow (m³/s)	Water Level (mOD)	Total Flow (m³/s)	Water Level (mOD)	Total Flow (m³/s)
08MSH01137	36.49		37.14		37.67	
08MSH00355	36.45		37.08		37.61	
01DRR00433	37.07		37.43		37.54	
01DRR00155	37.05		37.41		37.53	



## **APPENDIX C2**

### **Catchment Flood Risk Assessment Management Study (CFRAMS) – Present Day**

#### **FLOOD MAPS ONLINE**



**FIGURE C2-1**  
**CFRAMS PRESENT DAY HIGH PROBABILITY**  
**(1:10 YEAR FLOOD)**



**FIGURE C2-2**  
**CFRAMS PRESENT DAY MEDIUM PROBABILITY**  
**(1:100 YEAR FLOOD)**



**FIGURE C2-3**  
**CFRAMS PRESENT DAY LOW PROBABILITY**  
**(1:1000 YEAR FLOOD)**



## **APPENDIX C3**

### **Catchment Flood Risk Assessment Management Study (CFRAMS) – Mid-Range Future Scenario**

#### **FLOOD MAPS ONLINE**



**FIGURE C3-1**  
**CFRAMS MID-RANGE HIGH PROBABILITY**  
**(1:10 YEAR FLOOD)**



**FIGURE C3-2**  
**CFRAMS MID-RANGE MEDIUM PROBABILITY**  
**(1:100 YEAR FLOOD)**



**FIGURE C3-3**  
**CFRAMS MID-RANGE LOW PROBABILITY**  
**(1:1000 YEAR FLOOD)**



## **APPENDIX C4**

### **Catchment Flood Risk Assessment Management Study (CFRAMS) – High-End Future Scenario**

#### **FLOOD MAPS ONLINE**



**FIGURE C4-1**  
**CFRAMS HIGH-END HIGH PROBABILITY**  
**(1:10 YEAR FLOOD)**



**FIGURE C4-2**  
**CFRAMS HIGH-END MEDIUM PROBABILITY**  
**(1:100 YEAR FLOOD)**



**FIGURE C4-3**  
**CFRAMS HIGH-END LOW PROBABILITY**  
**(1:1000 YEAR FLOOD)**



**APPENDIX C5**  
**EXTRACT FROM**  
**NATIONAL INDICATIVE FLUVIAL MAPS (NIFM)**  
**PERESENT DAY**





**Figure C3: National Indicative Fluvial Mapping - Present Day**

**APPENDIX C6**

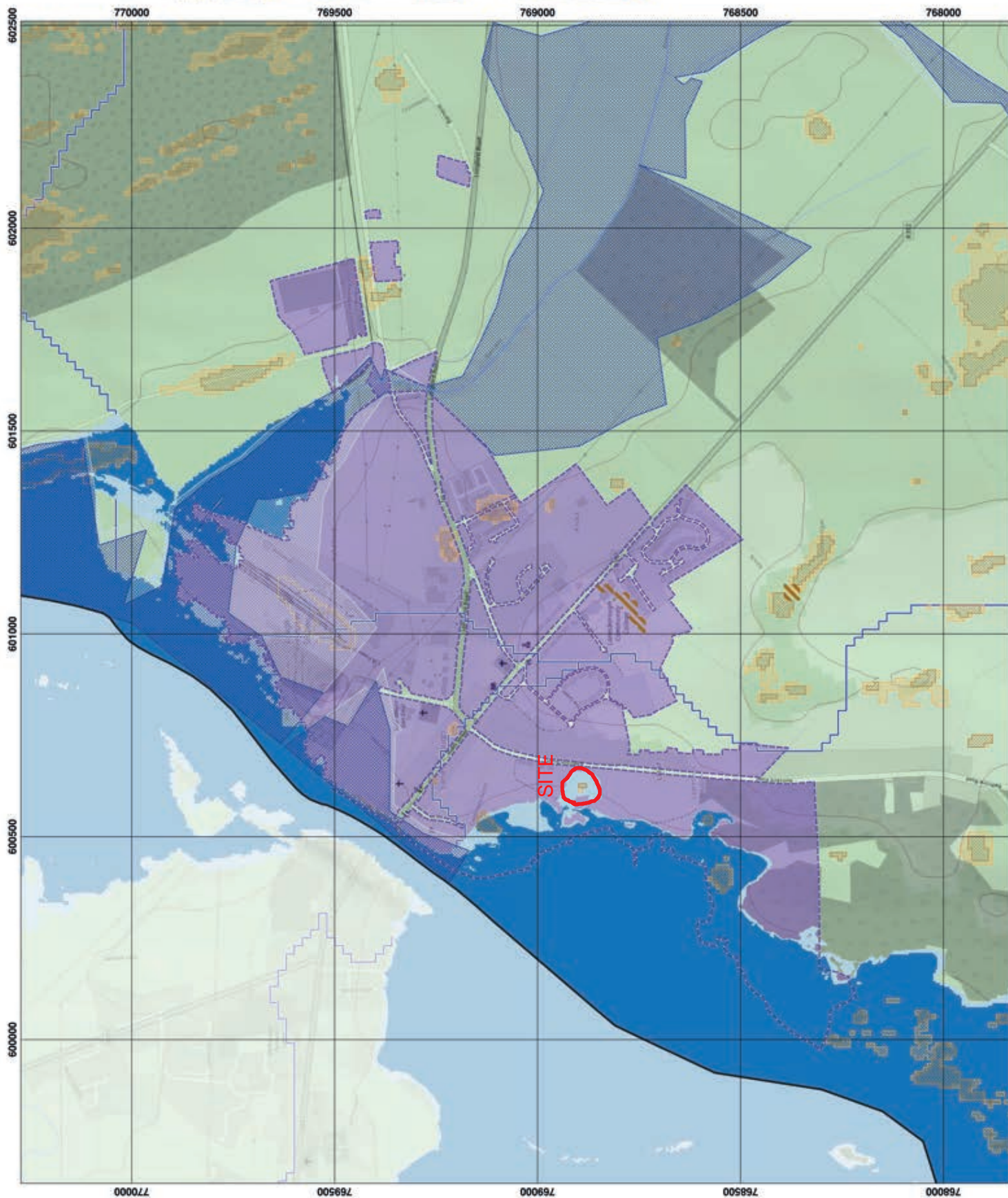
**EXREACT FROM LONGFORD CDP 2021-2027**

**PREDICTIVE FLOOD MAPS**

# Longford CDP 2021-2027

## Lanesborough Predictive Indicators

- Zoned Lands
- Rivers & Streams
- Lakes
- WFD River Sub Basins
- CFRAM Flood Extents
  - 1% AEP Fluvial Extent
  - 0.1% AEP Fluvial Extent
- GSI Groundwater Flooding
  - 1% AEP Groundwater Extent
  - 0.1% AEP Groundwater Extent
- PFRA Data supplied by  
Longford County Council
  - 1% AEP Fluvial Extent
  - 0.1% AEP Fluvial Extent
  - 1% AEP Pluvial Extent
  - 0.1% AEP Pluvial Extent
  - Groundwater Flooding

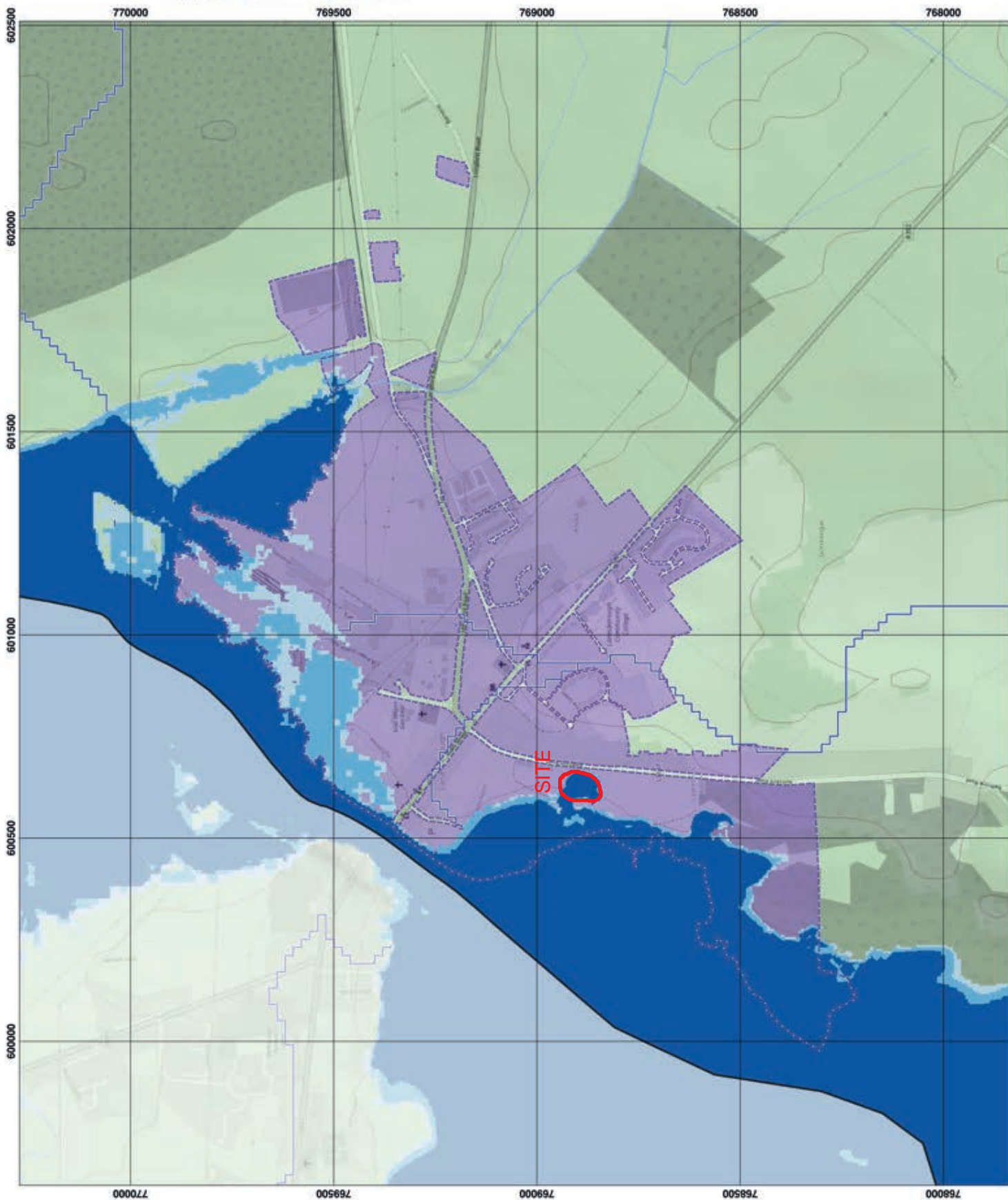




# Longford CDP 2021-2027

## Lanesborough CFRAM All Scenarios

- Zoned Lands
- Rivers & Streams
- Lakes
- WFD River Sub Basins
- CFRAM All Scenarios
  - Present Day Scenario
  - 0.1% AEP
  - Mid-Range Future Scenario
  - 0.1% AEP
  - High-End Future Scenario
  - 0.1% AEP

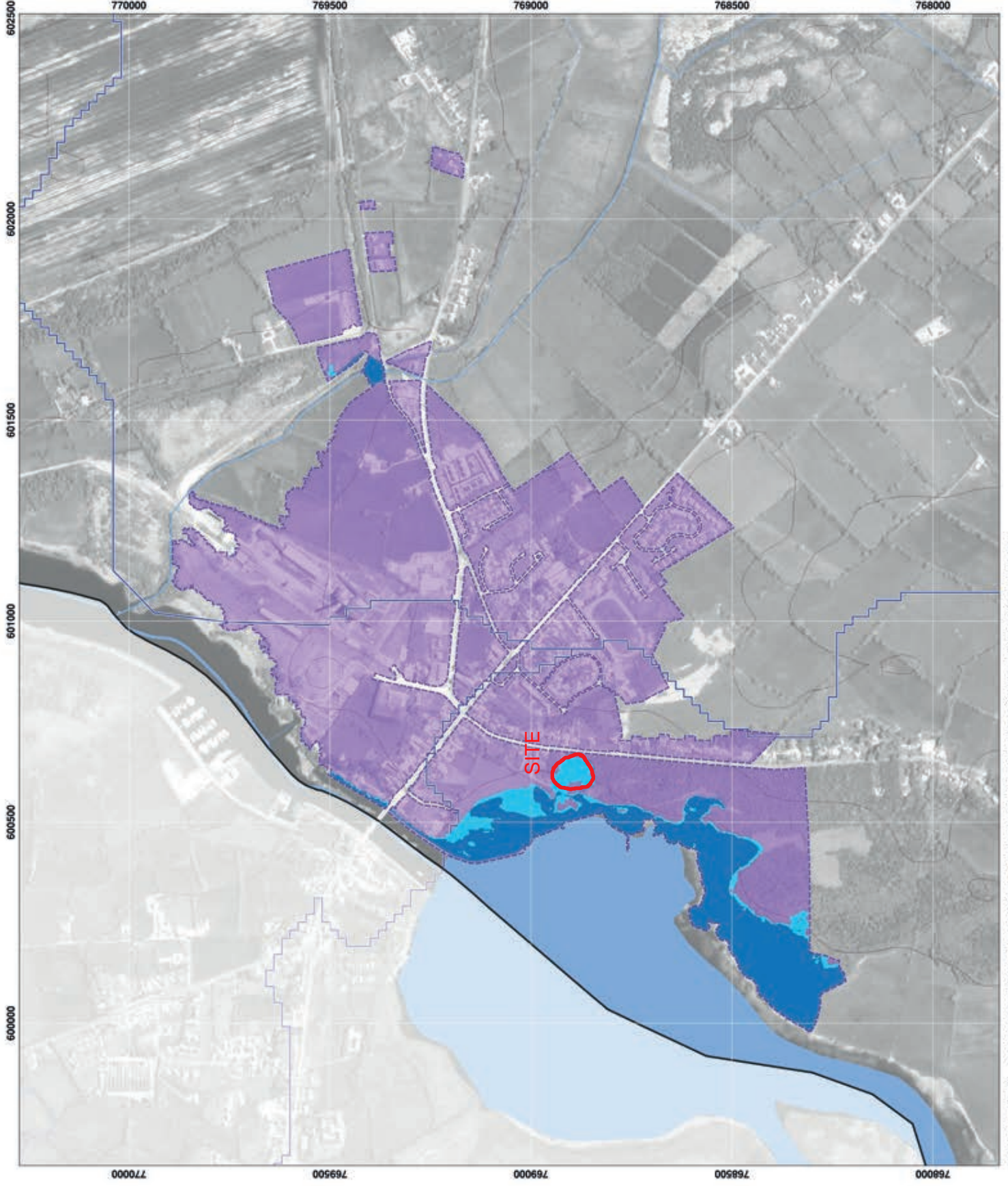




# Longford CDP 2021-2027

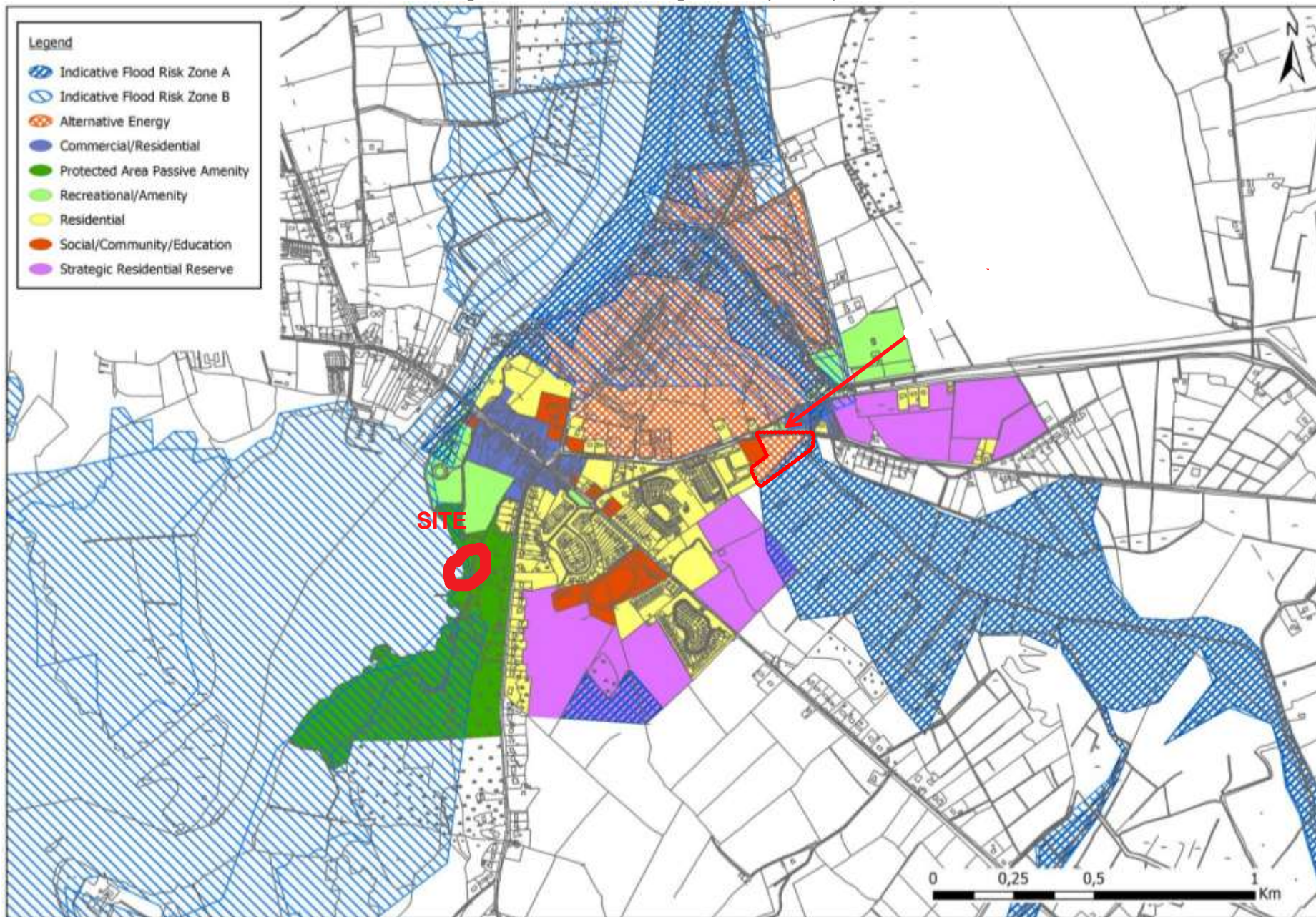
## Lanesborough Flood Zones

- Zoned Lands
- Rivers & Streams
- Lakes
- WFD River Sub Basins
- Indicative Flood Zones
- Flood Zone A
- Flood Zone B



**APPENDIX C7**  
**EXTRACT FROM LONGFORD CDP 2015-2021**  
**INDICATIVE FLOOD MAPS**





**Figure 3.25 Lanesborough Indicative Flood Risk Zones (overlay on older version of the Draft Land Use Zoning)**