









## Cavan Town Flood Relief Scheme



Newsletter 02 January 2023

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# Project Purpose

The purpose of the Cavan Town Flood Relief Scheme is to alleviate the risk of flooding to the community of Cavan Town by providing a scheme that is technically, socially, environmentally, and economically acceptable.

### **Project Overview**

A brief overview of the project and how we got here.  $\mbox{Page 2}$ 

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## **Project Overview**

The purpose of the Newsletter is to keep the public and stakeholders abreast of project updates and progress throughout the duration of the Cavan Town Flood Relief Scheme (FRS).

The project team is busy with various technical, social and environmental aspects of the Flood Relief Scheme is conducting site assessments and surveys of Cavan Town and its surrounding area and is detailed in sections below.

Stage 1- Scheme Development and Preliminary Design of the project commenced in June 2022. This newsletter covers the period November 2022 to January 2023.

Progress from June to October 2022 is included in Newsletter 01, accessible on the Cavan Town FRS Webpage. The webpage also includes the timeframe and updates of the project.

ByrneLooby have undertaken environmental walkovers, surveys, and a public consultation event and continue to gather all relevant information to generate an efficient scheme.

The page is found via the address: https://www.floodinfo.ie/frs/en/cavan-town/home/.



Breffni Park flooding October 2022

## Surveys

The team have developed a scope for a topographical, channel and culvert conditions survey which was advertised for public tender in November 2022. Tenders were received in December 2022 and Cavan County Council are in the process of awarding the contract to the successful tenderer.

Cavan Town's river network includes several culverts. Culvert surveys are important to help ByrneLooby determine adequacy and functionality of the channels during flood conditions.

Topographical and channel surveys are essential to the project planning to determine changes in elevation, terrains, contours, boundaries, obstructions and to allow assessment of potential flood mitigation measures.

The contract also includes for CCTV, Drainage, and utility surveys.

It is anticipated that the survey work will commence in February 2023 and will be ongoing until May/June of 2023.



Japanese Knotweed identified from Invasive Species Survey for Cavan Town FRS

## **Environmental Work**

An Invasive Species Management Plan has been prepared and the project team have identified a treatment programme to address the invasive alien species. It is expected that the first treatment will occur in Spring 2023 and the programme will continue for at least 3 years.

Landscape and Visual specialists and an Archaeology specialist have begun work on establishing areas and features of interest in the scheme area feed into the constraints assessment.

Following the initial habitats and species walkover, the environmental team have also identified a number of specialist surveys that are now being progressed. Specialist surveys for the following are currently being scoped with a view to commencing the surveys in early 2023.

- Tree Surveys
- Aguatic Ecology
- Noise and Vibrations
- Air Quality and Climate
- Otter Survey

These surveys will help identify potential environmental impacts within the scheme area. The impacts will be included in the Appropriate Assessment and an Environmental Impact Assessment.

These processes are a legal requirement necessary to comply with European Environmental Directives.

# Hydrology

Hydrological analysis is a key part in defining watercourses and catchments within the scheme area and how they respond during flood events. Understanding how these act helps to identify flood risk and allows development of flood protection measures. The rivers and streams forming part of the study are illustrated below.

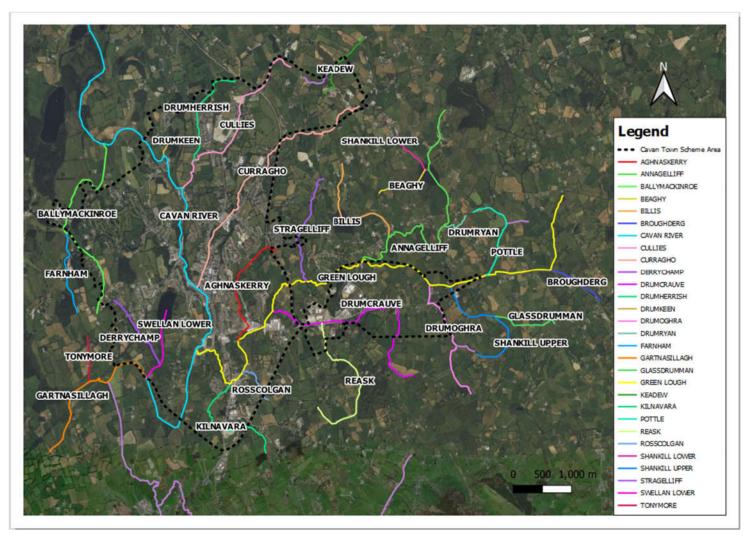
The hydrology team are busy with assessing rainfall and river flows to establish the hydrological regime of the rivers and streams in the scheme area.

A hydrological method statement (HMS) has been prepared and presented to Cavan County Council and the OPW during a workshop conducted on the 21<sup>st</sup> of December 2022.

The HMS outlined the proposed approach to how the flood flows will be established. The team will complete all necessary assessments to allow estimations of the design standard flood flows for the scheme.

For the Cavan Town FRS, the design standard is the 1% annual exceedance probability event, often referred to as the 1 in 100-year flood. This means that the design flood event has a 1% change of occurring in any given year.

A Hydrology Report will be prepared over the coming months to detail the assessments and analyses complete by the team. It is expected to be completed in Q<sub>3</sub> of 2023.



### Flood Events

Following on from the October 2022 flood event, the project team have been collecting information on the flooding from Cavan County Council and the public.

Flood extents have been digitised from the data collected which will be used as the scheme progresses. A report on the flooding is being finalised at present. The peak flow recorded on 28<sup>th</sup> October 2022 was 9.70m³/s. Statistical analysis indicates that the event was between a 20% (1 in 5 year) and 10% (1 in 10 year) AEP event (see below).

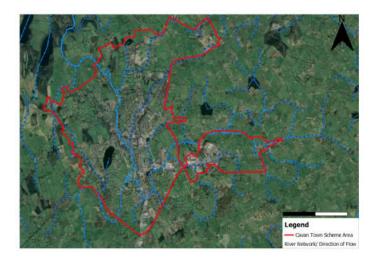
|                          | Annual Exceedance Probability (AEP) Event |      |       |       |       |       |
|--------------------------|---|------|-------|-------|-------|-------|
|                          |   |      |       | 5%    |       | 1%    |
| Design Peak Flows (m³/s) | 6.87                                      | 8.94 | 10.55 | 12.24 | 14.70 | 17.65 |

Members of the public are encouraged to make submissions to the project team via email or otherwise at the contact details provided below with all relevant flood information on future events.

### What's Next?

Over the next few months, the Project Team will be working on:

- Detailed analysis for hydrology
- Carrying out specialist environmental surveys
- CCTV, Ground Penetrating Radar, Drainage & Topographical Surveys
- Assessment and modelling for the progression of Hydrology Report.





### Contact Us

If you would like to contact our Project Team about any matter relating to the Cavan Town Flood Relief Scheme you can do so through the following:

### Email

CavanTownFRS@ByrneLooby.com

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If you would like any further information on the Scheme, please visit our website:

https://www.floodinfo.ie/frs/en/cavan-town/home/