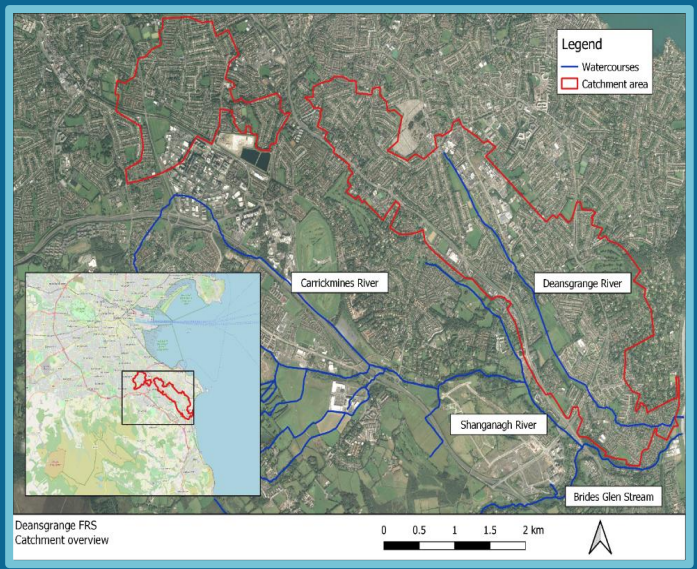
Deansgrange Stream
Flood Relief Scheme

Deansgrange Stream Flood Relief Scheme

PUBLIC ENGAGEMENT EVENT #1



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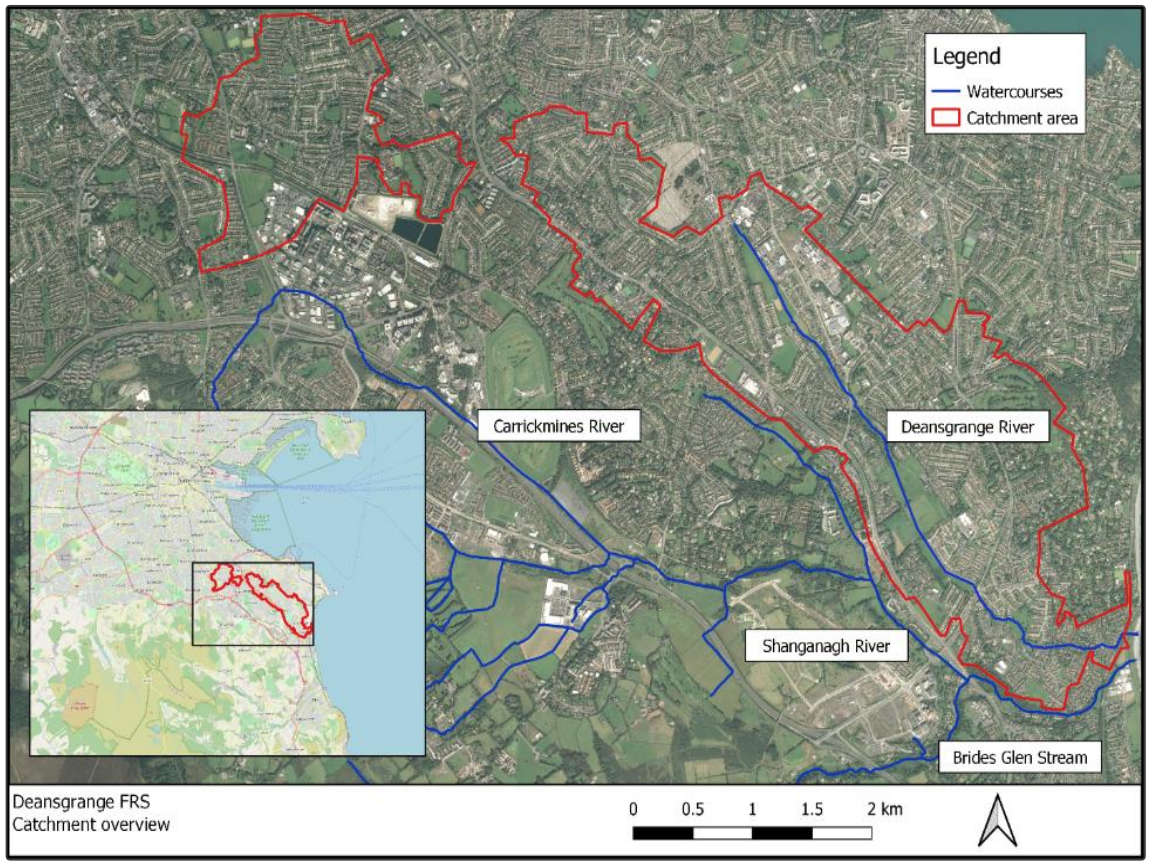
Introduction



- There is a history of property flooding along the Deansgrange stream.
- The aim of the scheme is to reduce flood risk to the community in the Deansgrange catchment.
- The scheme commenced in December 2019.
- The main work on site is anticipated to commence in 2022 and be completed by 2023.
- This is our first public engagement event.

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Project Team

- Dún Laoghaire-Rathdown County Council (DLRCC)
- Office of Public Works (OPW)
- JBA Consulting
- J.B. Barry and Partners

- Dún Laoghaire-Rathdown County Council has appointed the joint venture team of JBA Consulting and JB Barry to assess, develop, design and manage the delivery of a sustainable flood relief scheme for the Deansgrange catchment.

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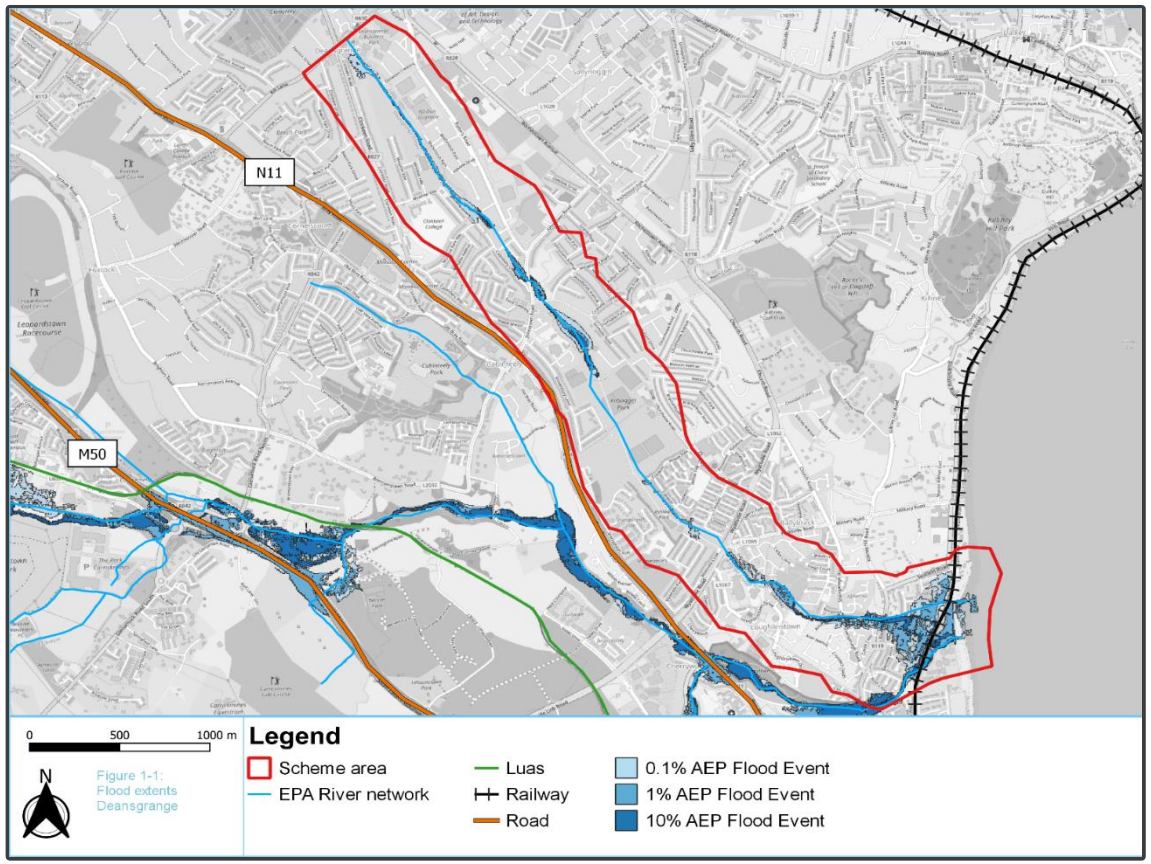
History of the Scheme



- The Eastern Catchment Flood Risk Assessment and Management (CFRAM) was a study commissioned by OPW to meet the requirements of the EU Floods Directive.
- One of the aims of the study was to identify options for managing the flood risks for localised high-risk areas, including the Deansgrange catchment.
- DLRCC are currently implementing one of the options from the ECFRAM which is a new screen and flood storage at Kilbogget Park. This is due to commence on site in early October and will provide immediate benefits downstream on completion.
- The current commission is to provide a much more detailed, comprehensive and specific flood model of the Deansgrange catchment than provided by the ECFRAM.

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Stages of the Scheme

Stage	Statutory Processes
I	Scheme Development
	Constraints Study
	Screening for Appropriate Assessment
	Initial Consultation with Stakeholders
	Scoping for Environmental Impact Assessment
	Initial Public Consultation
	Preparation of Environmental Assessment of Options Report
	Public Consultation on Preferred Scheme
	Preparation of Appropriate Assessment
	Environmental Impact Assessment Report for Preferred Option
II	Statutory Public Exhibition / Planning
III	Detailed Design and Tender
IV	Construction
V	Handover to Client

Specific Studies

- Data gathering and review
- Site walkover
- Ecological assessments
- Topographic surveys
- Culvert surveys
- Geotechnical surveys
- Hydrological assessment and hydraulic modelling
- Development of flood management options
- Cost Benefit Assessment (CBA)
- Multi-Criteria Analysis (MCA)

- There are a number of stages involved in the completion of a flood relief construction project.
- There are five phases of work. Progression to each stage relies on a successful outcome of the previous stage.

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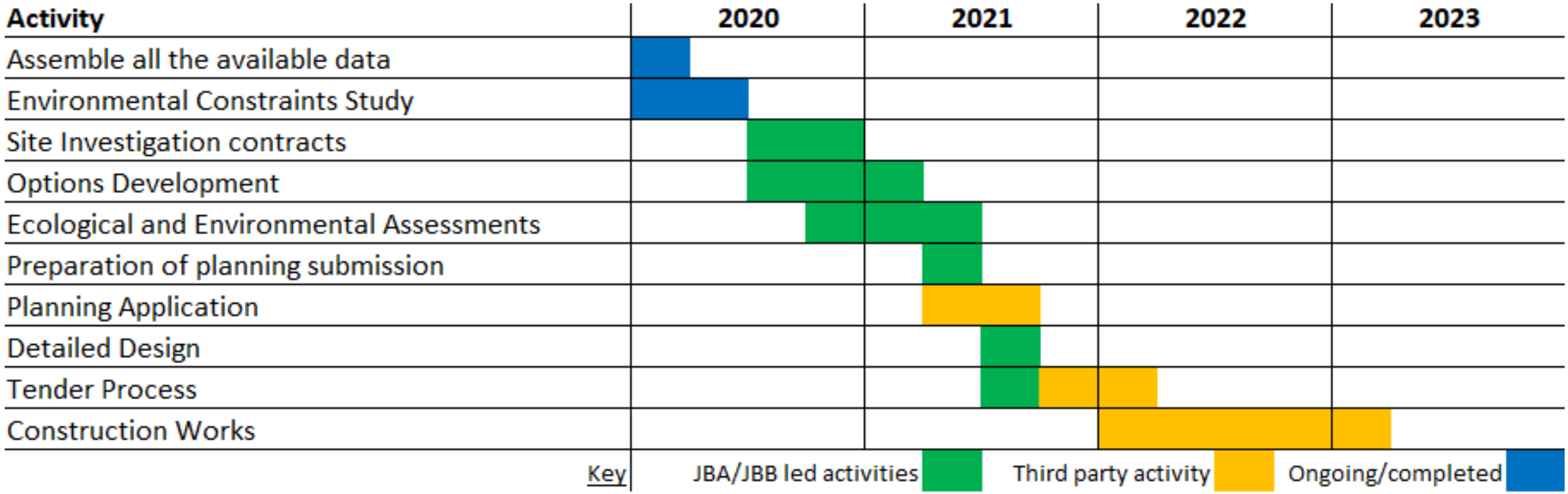
Programme

- The programme outlines some of the key steps involved in bringing the project from inception to having 'diggers on site'.
- Stakeholders and the project website will be kept up to date with any changes as the scheme progresses.



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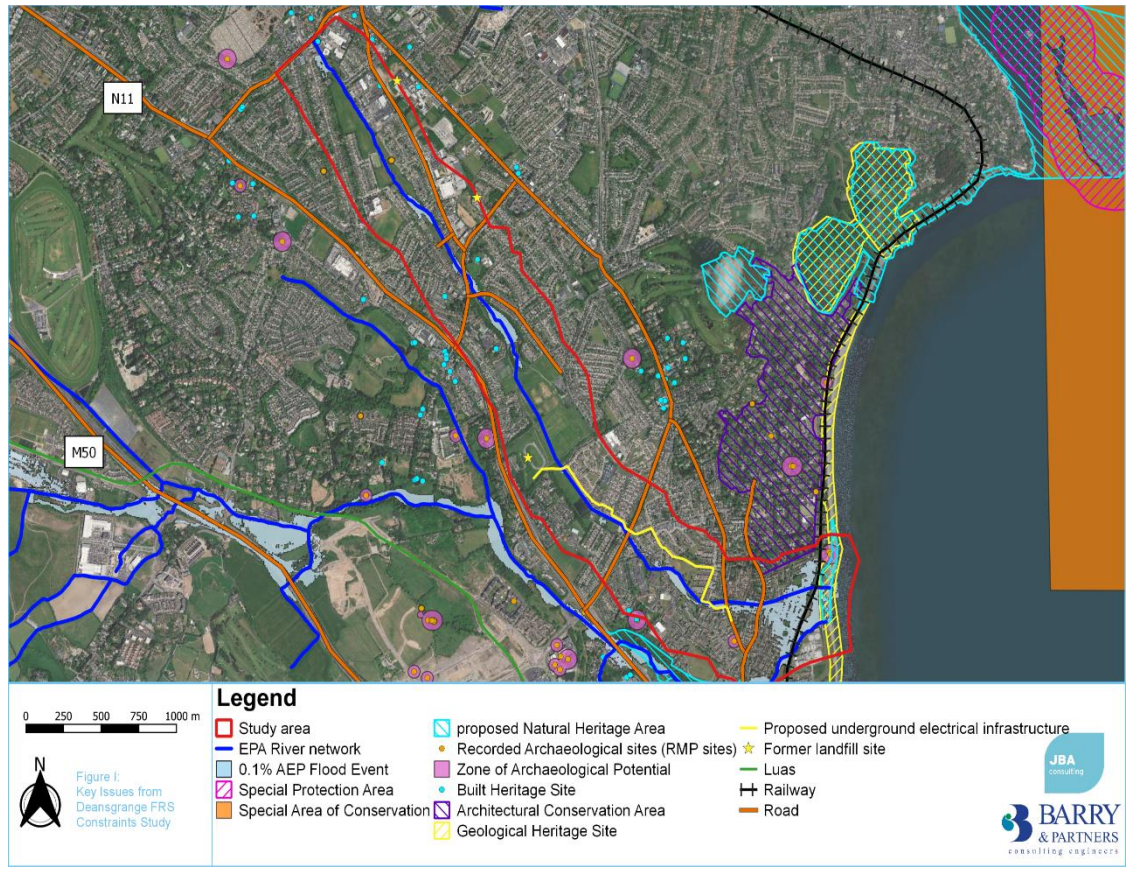
Project Constraints

- A Project Constraints report has been prepared to identify any limitations to the scheme caused by the following elements: human beings, material assets, watercourses, biodiversity, soils and geology, landscape and visual amenity, cultural heritage, air and noise.
- Our flood mitigation solution will consider all these constraints and provide the required level of protection while preserving the landscape character of the area, not harming local biodiversity and mitigating other negative impacts.



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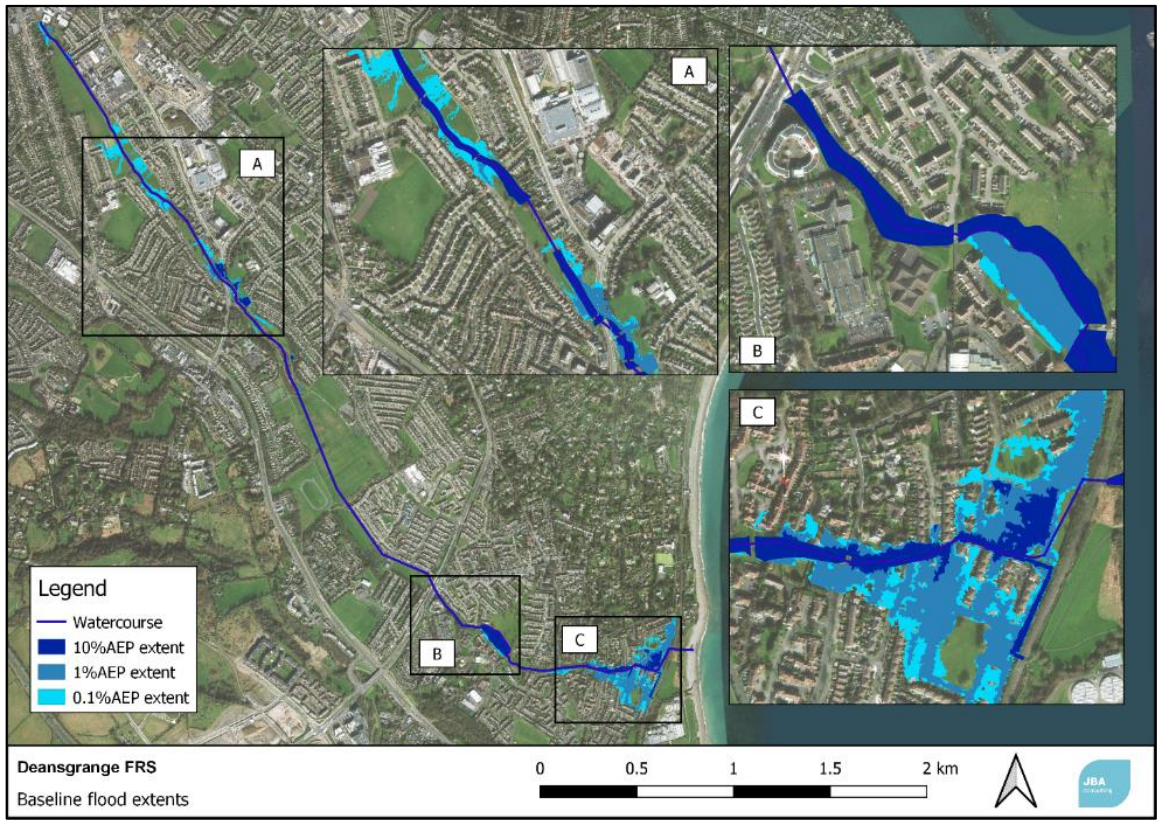
Updated Flood Modelling



- The hydraulic model has been updated to reflect the detailed surveys recently undertaken and recent changes within the catchment.
- The key area at risk of flooding is the Seafield-Bayview area at the downstream end of the watercourse (Area C).
- Other areas at risk include areas near and within Kilbogget (Area A) and Glenavon Parks (Area B).
- As these are largely open space areas, the overall impact of flooding is low as few properties are shown to be affected.

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Key Problem Areas

The flood modelling has identified key problem areas on the network:

- Potential blockage of culverts at Seafield, Johnstown Road and Kilbogget Park
- Potential build-up of debris at the palisade fence near Seafield and Bayview estates inhibiting the flow path
- Restricted flow through outfall of the stream to the sea through the rail culvert

Seafield Culvert Screen

Seafield/Bayview Palisade Fence

Seafield Rail Culvert

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Flood Risk Management Options

- Now that we have gathered extensive data and updated the flood model, we are assessing measures that can mitigate the flood risks within the catchment.
- The Flood Relief Scheme will consist of one or a combination of flood risk management measures.
- The preferred scheme will be identified by balancing the economic, social, cultural heritage and environmental aspects of each of the options.
- As a result of the improved modelling we have focused on the following measures, but we are also looking for your input to identify other potential options.

- Flood management measures that we are initially considering include:
  - Flood embankments
  - Flood walls
  - Raised road and footpath levels
  - Flood storage
  - Landscaped ground levels
  - Individual property protection
  - Management of debris and screen management
  - Overland flow paths for excess flows
  - Culvert upsizing

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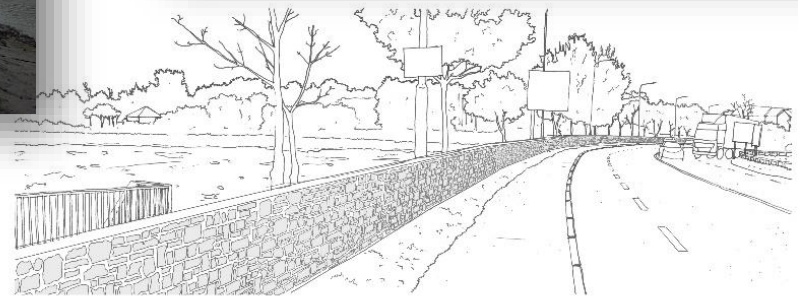
Examples of Flood Walls



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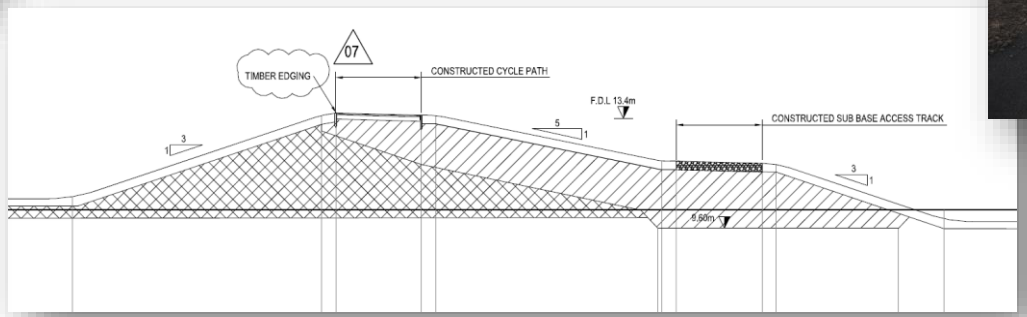
Examples of Flood Embankments

- Embankments are usually made of earth and have a clay core to prevent water seeping through.
- They need more space than a flood wall
- There are better opportunities to integrate them into the surrounding landscape.



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Opportunities to Take Part

- The objective of this scheme is to find a solution to flooding along the Deansgrange stream, which is beneficial to residents and stakeholders in the area.
- We want to listen to the views of those who will be living and working in the Deansgrange catchment, and others who have an interest in the long-term plans.
- Questionnaire forms are available and can be completed online or downloaded and returned at a later date.
- We will hold further consultation days as the project progresses and you will be given the chance to comment again as the scheme develops.
- The next of these will be in the spring of 2021, when we will have developed outline options for the defences and flood management that we will present to you.
- You can find out more about the project in the following places:
  - www.deansgrangefrs.ie
  - email info@deansgrangefrs.ie
  - Phone: 01 485 1400

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