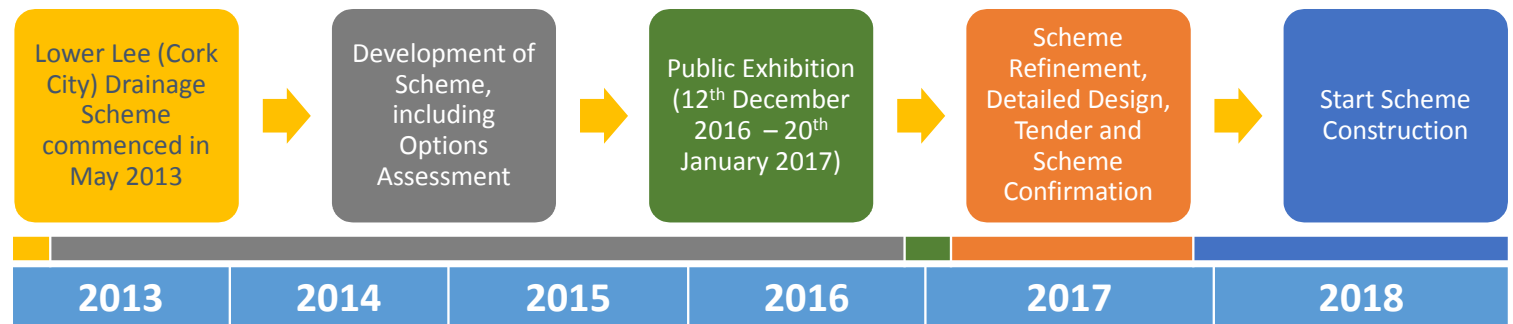


Lower Lee (Cork City) Drainage Scheme

Scheme Objectives & Overview

- The River Lee and Cork City have a long history of flooding, with flood events having occurred as recently as 2009, 2014 and 2015/16.
- Consultants (engineering and environmental) were commissioned by the Office of Public Works (OPW) in 2013 to develop options for the Lower Lee (Cork City) Drainage Scheme.
- The Project Team includes a Steering Group made up of the OPW, Cork City Council, Cork County Council, and ESB in addition to the engineering and environmental consultants.
- The project has progressed through a constraints study, hydrological and hydraulic analysis, preliminary geotechnical investigations, options assessment, development of a preferred option, development of a flood forecasting system, phasing assessment, environmental assessment and is now at public exhibition stage.
- An Indicative Flow chart showing the process from inception through to construction for the Lower Lee (Cork City) Drainage Scheme is shown to the right:



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Public Consultation



Public Information Day No.1

17th July 2013

Purpose of project set out
 Constraints study explained
 Overview of potential outcomes provided
 Your views were sought



What has happened since?

Constraints Study
 Hydrology and Hydraulic Modelling
 Assessment of Viable Options
 Preliminary Geotechnical Investigations
 Emerging Preferred Option Identified



Public Information Day No.2

29th July 2014

Progress update
 A chance to have your views heard on the emerging preferred options



What has happened since?

Scheme Review, taking on board feedback from Public Information Day No.2
 Production of Scheme Documentation
 Appropriate Assessment Screening
 Environmental Impact Statement



Public Exhibition

(12th December 2016 – 20th January 2017)

A third chance to have your views heard



And then?

Scheme Refinement
 Detailed Design
 Detailed Geotechnical Investigations
 Confirmation of Scheme

Your views taken on board



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Environmental Impact Statement

- Environmental assessments to determine the potential impacts of the proposed scheme have been undertaken, culminating with the publication of an Environmental Impact Statement (EIS).
- The EIS is presented in two volumes: 1) Main Report incorporating a Non-Technical Summary, and 2) Appendices
- The EIS considers the potential environmental impacts of the scheme on Human Beings, Flora and Fauna, Soils and Geology, Air and Climate, Hydrology and Hydrogeology, Landscape, Cultural Heritage, Material Assets, Traffic and Transport, and the interaction of these.
- Potential impacts range from temporary to permanent, slight to significant, and both positive and negative.
- Where the potential for negative impacts has been identified, mitigation measures have been proposed to reduce or eliminate the impact where possible.
- The EIS is available for view at the exhibition, and is available for download from www.lowerleefrs.ie.



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Option Development

Flood Risk Management Options Considered at Preliminary Assessment

- Do Nothing
- Do Minimum
- Non-Structural Measures (e.g. flood warning system or individual property protection)
- Relocation of Properties and/or infrastructure
- Reconstruction of Properties and/or infrastructure to a higher level
- Flow Diversion (e.g. river diversion or flood flow bypass channel)
- Flow Reduction (e.g. upstream catchment management or flood storage)
- Flood Containment through construction of Flood Defences
- Increase Conveyance of Channel (upstream and/ or through and/or downstream of the town)

Options Brought Forward for Detailed Assessment

- Option 1:**
Flow Reduction of South Channel and Direct Defences (among other measures)
- Option 2:**
Isolation of South Channel and Direct Defences (among other measures)
- Option 3:**
Direct Defences Only (among other measures)

Preferred Option

- Option 1:**
- Flood Forecasting system
 - Fluvial Flood Warning System
 - Revised Dam Operations
 - Designation of washlands
 - Direct Defences (walls & embankments)
 - Flow control structure in the south channel to divert flows
 - Demountable flood gates at critical locations
 - Regrading of roads, bridge and culvert repair
 - Drainage works and pumping stations

Options assessed using Technical, Social, Environmental & Economic Criteria



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Lower Lee (Cork City) Drainage Scheme

- Development of Optimised Dam Operating Procedures for extreme flood events;
- Development of a Detailed Flood Forecasting System and Flood Warning System (Public Alerts);
- Designation of upstream washlands to facilitate greater advance discharges (up to 300 m³/s) from the dams;
- Localised defences at an isolated number of properties between Inniscarra and the City;
- Flow reduction structure on the South Channel to rebalance flows in the North and South Channel (divert greater proportion of flow to North Channel during extreme events);
- Direct defences on North and South Channels of the River Lee (walls, embankments, building upon existing quay walls);
- Flood gates at some footbridges and boardwalk locations;
- Bridge and culvert repair work, road re-grading; and
- Localised surface water pumps to deal with 'back of wall drainage'.



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Formal Public Exhibition Process

- Now that the proposed works comprising the Lower Lee (Cork City) Drainage Scheme have been determined and an outline design completed, the OPW will seek consent for the proposed scheme in accordance with the provisions of the Arterial Drainage Act.
- This statutory process includes a Public Exhibition (12th December 2016 – 20th January 2017), during which the plans and particulars of the proposed scheme will be put on Public Display (during standard opening hours) at the following locations: **(1)** The Foyer, Civic Offices, Anglesea Street **(2)** The Foyer, County Hall, Carrigrohane Road, **(3)** Public Library, Ballincollig, **(4)** Central Library, Grand Parade, Co. Cork.
- Representatives from the Project Team will attend at Millennium Hall, City Hall between 2 – 8PM during the period of the Public exhibition on 12th December, and again on 13th and 20th December 2016 (3 – 9PM) and on 19th January 2017 (3 – 9pm), to explain the scheme to members of the public and to address queries.
- The Scheme Drawings, EIS and associated documents will be available to download from www.lowerleefrs.ie or in CD format from the Office of Public Works, Flood Projects Management Services, 52 St. Stephen's Green, Dublin 2.
- Members of the public are invited to submit written observations which will be considered and responded to. The deadline for submissions is 17th February 2017. An Exhibition Report, including all observations received will be sent to the Minister for Public Expenditure and Reform before formal approval of the Scheme at Confirmation Stage.



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