Project Newsletter No. 04 | May 2023

Newsletter

Limerick City & Environs Flood Relief Scheme







Comhairle Cathrach & Contae **Luimnigh** Limerick City & County Council



MAKING COMPLEX EASY

Newsletter Limerick City & Environs Flood Relief Scheme



What stage is the project at?

Limerick Flood Relief Scheme design is currently at the 1st stage of the project. This stage is where a preferred scheme is identified and developed. RPS project team is coordinating detailed surveys, investigations and undertaking flood modelling. Based on the results of these extensive surveys and investigations, RPS will identify a flood mitigation measures e.g. defences that are appropriate to manage flood risk within Limerick City and its environs.

Geotechnical

Limerick City and County Council (LCCC) appointed Priority Geotechnical Ltd in March 2022 to undertake a detailed Ground/Geotechnical Investigations (GI) of the existing embankments throughout the Limerick FRS scheme area.

Due to the scale of the survey area and ground conditions encountered the comprehensive GI is still ongoing.

Information from the GI will allow RPS to accurately access the condition of the existing embankments and determine their viability as flood defences for the scheme.

RPS' Geotechnical Engineers are currently undertaking technical seepage and stability analysis of all surveyed embankments and will be reporting to LCCC over the coming months.



RPS are developing the specifications for the 2nd phase of the Detailed GI works. The 2nd phase of investigations will provide a detailed understanding of the ground conditions where flood defences are to be proposed.

Hydrology and Hydraulics

A comprehensive hydrological analysis, that includes an analysis of the coastal water and wave levels is ongoing. This will be used to inform design river flows, water levels and coastal/tidal impacts.

To inform the determination of appropriate flood management measures, RPS is developing a 'Hydraulic Model' for the Scheme. This model is a tool that will be used to identify flood risk and test a range of potential flood defence design options.

LCCC have engaged ENVA Ltd. to undertake a visual inspection (CCTV) survey of the critical culverts throughout the scheme area. A CCTV survey is a process for examining the condition of drainage systems remotely with a camera system that records video footage and captures other useful data. This







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will provide the team with an understanding of the condition of storm culverts and help identify issues that may contribute to flooding.

Environmental

Various ecological surveys of the scheme area have been undertaken by RPS' ecologists during 2022 and 2023. These identify ecological constraints and inform the assessment of ecological impact from the project.

Advance treatment of the Invasive Alien Plant Species (IAPS) within or adjacent to areas where flood defence works may be undertaken is underway. Japanese Knotweed Ireland (JKI) commenced the treatment of IAPS in the Summer 2022 and it is envisaged that this treatment programme will continue into 2024 / 2025.

A detailed Ornithology Survey is underway and is being undertaken by ornithological specialists, MKO. This survey includes monthly bird counts to identify bird populations within the River Shannon and River Fergus Estuary SPA and adjoining lands which may be impacted by works related to the flood relief scheme. These surveys commenced in Winter 2022 and will inform environmental assessment of the preferred scheme option.



Defence Asset Survey

During 2022 RPS undertook a comprehensive survey of the existing flood defence assets (shown in the image below) within the scheme area. The flood defence assets included embankments, sluices, culverts, under a demonstrate la

valves, demountable defences and walls.

This visual inspection will inform the design team about the existing condition and geometric properties of these defences and their suitability for inclusion within a preferred scheme.









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Additional Information & Contact Details

Additional information in relation to the overall progress, current news items and project reports can be found on the Limerick City & Environs Flood Relief Scheme project website.

The project team can be reached at the Limerick City & Environs FRS email address.



Tel: 021 466 5900

Email: limerickfrs@rpsgroup.com

Postal Address:

Limerick City & Environs Flood Relief Scheme – Project Manager RPS Consulting Engineers Innishmore, Ballincollig, Co. Cork P31 KR68

Website: www.floodinfo.ie/limerickfrs

Next Steps:

Geotechnical Investigations:

The 1st phase GI field operations are scheduled to finish by June 2023.

RPS will then finalise the Geotechnical Study and develop the Ground Investigation Report (GIR). The Geotechnical Study and GIR will inform the development of flood defence options.

RPS is also identifying a programme of detailed Geotechnical Investigations (2nd Phase). This investigation is to provide information for the detailed design of the preferred flood defences. Procurement of this phase of investigation contracts is expected to comment during Q3 2023.

Hydraulics & Hydrology:

The Scheme Area's flood risk and flood extents will be determined using the calibrated and validated hydraulic model developed for the Scheme. This is a first step in identifying technical solutions to lower flood risk to businesses, residents, and infrastructures within the scheme area. This will be published for public comment later in 2023.

Environmental:

A series of detailed ecological surveys is scheduled to be undertaken during this summer season.

These surveys will inform the environmental impact assessment of the preferred scheme.

JKI Treatment will continue treatment of IAPS in during 2023 and this will continue into 2024 and 2025.

The Ornithology Survey undertaken by MKO will continue the survey into Winter 2023

RPS will also continue to provide ecological oversight, as appropriate, while activities are ongoing on the ground.

Stakeholder Engagement

Engagement with stakeholders and the public is ongoing.

Key local and statutory stakeholders have been communicated with as part of the initial Public Consultation. Further communications will take place as scheme options are developed.

Input from the public and other stakeholders is welcomed by the project team at any time during the project. All feedback / input should be submitted by email, post or phone to the RPS project team using the contact details noted above. These inputs will be reported to the LCCC and OPW Steering Group and considered as part of the scheme development.

Programme:

Limerick City & Environ FRS - Programme		2021			2022			2023			2024			2025			2026			2027			2028				2029			2030			2031			
		Q1	Q2 (Q3 Q	4 Q1	Q2	Q3 Q4	Q1	Q2	Q3 Q	Q4	1 Q2	2 Q3	Q4	Q1 Q	2 Q3	9 Q4	Q1	Q2 Q	3 Q4	Q1	Q2 Q	3 Q4	Q1	Q2 (23 Q	4 Q	1 Q2	Q3 (Q4 C	1 Q2	Q3	Q4 (21 Q	12 Q.	3 Q4
Stage I:	Options Assessment, Scheme Development & Design																																			
Stage II:	Planning / Devlopment Consent																																			
Stage III:	Detailed Design & Tender																																			
Stage IV:	Construction																																			
Stage V:	Handover																																			







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