Newsletter

Limerick City & Environs Flood Relief Scheme











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What stage is the project at?

The Limerick City & Environs Flood Relief Scheme (LFRS) is currently at Stage 1 of the project. This stage is where potential flood defence designs are identified and considered, to develop the best flood defence options for the area.

The 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 flood mitigation measures that are appropriate to manage and prevent flood risk the LFRS project area.

Geotechnical

RPS is currently undertaking a Geotechnical Study of existing flood defence embankments in the LFRS project area. The purpose of the study is to determine the condition and make-up of these historical flood defence embankments.

To inform the Geotechnical Study detailed preliminary Ground Investigation (GI) works were undertaken in the vicinity of existing flood defence embankments. Limerick City

& County Council (LCCC) appointed PGL as the GI contractor.

PGL were tasked with undertaking both intrusive (drilling/boring) and non-intrusive (above ground) surveying e.g., resistivity surveying GI works to gather data on the current ground conditions.

The GI field works concluded in August of 2023.

RPS have begun assessing and collating the ground investigation data from the fieldworks. This data will play an essential role in:

- the progression of the geotechnical study,
- the assessment of the current flood defence embankments and
- determining the embankments viability as flood defences for the scheme.

RPS in conjunction with Limerick City & County Council is progressing further detailed ground investigation works (2nd Phase). These detailed GI works will be used to determine the ground conditions in areas where flood defences may be considered and will play a vital role in the determination of the preferred scheme design. The works are anticipated to take place in late 2023 or early 2024. The scope for this investigation covers areas throughout Limerick City and its Environs.







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Hydrology and Hydraulics

The Hydrology Report for the scheme in nearing finalisation. The Hydrology Report summarises the findings from the hydrological analysis which focuses on coastal and wave analysis as well as quantifying the volume and flow rates of water in streams, rivers, and tributaries. This is used to assess the flood risk from pluvial (rain), fluvial (river, streams, lakes), and coastal sources.

RPS is advancing the 'Hydraulic Model' for the Scheme. This model will identify flood risk and will be used to test a range of potential flood defence design options. The model is well advanced, and it anticipated that the model will be completed in late 2023.

ENVA Ltd. have completed a CCTV visual inspection of the main culverts within Limerick City & Environs in May of 2023. The CCTV surveys have provided an in-depth examination of the existing drainage system. This has enabled the team to gain an understanding of the condition of the storm culverts. Findings from the survey are factored into the hydraulic analysis.

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.

Japanese Knotweed Ireland were appointed in 2022 as the Invasive Alien Plant Species (IAPS) treatment specialists for the scheme. The treatment programme is anticipated to be over a three-to-five-year period.

The purpose of the treatment is to mitigate the risk of spreading IAPS (including Japanese Knotweed, Himalayan Balsam and Giant Hogweed) while undertaking investigation works and reduce the risk of IAPS's impacting the development of the scheme as a whole. Treatment measures include, hand pulling and foliar spraying of herbicides.

Japanese Knotweed Ireland completed the 2023 Spring Treatment in July and the Autumn Treatment in September and will begin the next stage of treatment in the Spring of 2024.

McCarthy Keville O'Sullivan (MKO) are undertaking a detailed bird (ornithological) survey within the LFRS project area. The area includes the River Shannon and River Fergus Estuaries Special Protection Areas (SPA). The purpose of the survey is to collect essential data on bird species and breeding birds to gain a better understanding of the habitats residing within the project area. This will be critical in evaluating



what potential impact the Flood Relief Scheme may have on certain bird species.







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



Website: www.floodinfo.ie/limerickfrs

Postal Address:

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

Next Steps:

Geotechnical Investigations:

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

The Detailed GI (2nd Phase) is being advanced. RPS are working with LCCC to finalise the GI contract documentation to appoint suitable contractors to carry out the field works. The procurement of the investigation contracts is expected to commence late 2023.

Hydraulics & Hydrology:

Upon completion of the hydraulic model, the Hydraulics report will be finalised and uploaded to the website later this year (2023) along with the Hydrology report.

Environmental:

The detailed ecological surveys are now scheduled to take place in 2024. These surveys will include:

- Terrestrial habitats & Flora,
- Mammals and Bats,
- Amphibian and Reptile,
- Freshwater and estuarine ecology.

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

The Invasive Alien Plant Species treatment undertaken by JKI in 2023 will be reviewed and changes to the scope of the treatment area will be made in line with the scheme design options.

The Ornithology Survey is currently underway and will continue into 2024.

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 & Environs Flood Relief Scheme - Programme	2021		2022			2023			2024			2025			2026				2027			2028			2029				2030			2031			2032		
	Q3 Q	4 Q1	Q2	Q3 Q4	Q1	Q2 (Q3 Q	4 Q1	Q2	QЗ	Q4 C	Q1 Q2	2 Q3	Q4	Q1	Q2	Q3 C	Q4 Q1	1 Q2	Q3	Q4 Q	11 Q	2 Q3	Q4	Q1	Q2 C	Q3 Q	4 Q1	Q2	Q3 Q	4 Q1	Q2	QЗ	Q4 (Q1 Q	2 Q3	Q4
Stage I: Options Assessment, Scheme Development & Design																																					
Stage II: Planning / Development Consent Process																																					
Stage III: Work Packages & Tenders for Contracts																																					
Stage IV: Construction																																					
Stage V: Handover Works																																					









