

# Midleton Flood Relief Scheme – Update post Storm Babet

9<sup>th</sup> February 2024

Mr. Michael Lynch, Divisional Manager, Cork County Council



Comhairle Contae Chorcaí  
Cork County Council



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# Midleton Flood Relief Scheme



- **As per all Flood Relief Scheme, the Midleton FRS is broken into 5 Stages:**
  - **Stage I: Development of flood defence options & identification of a preferred Scheme**
  - **Stage II: Statutory Planning/Consent Process, including Environmental Impact Assessment**
  - **Stage III: Detailed Construction Design and Tender**
  - **Stage IV: Construction**
  - **Stage V: Handover**
- **Stage I of the Scheme is now substantially complete**
- **Work on elements of Stage II has been underway since Q3 of 2023.**

# Initial Storm Babet Assessment Report

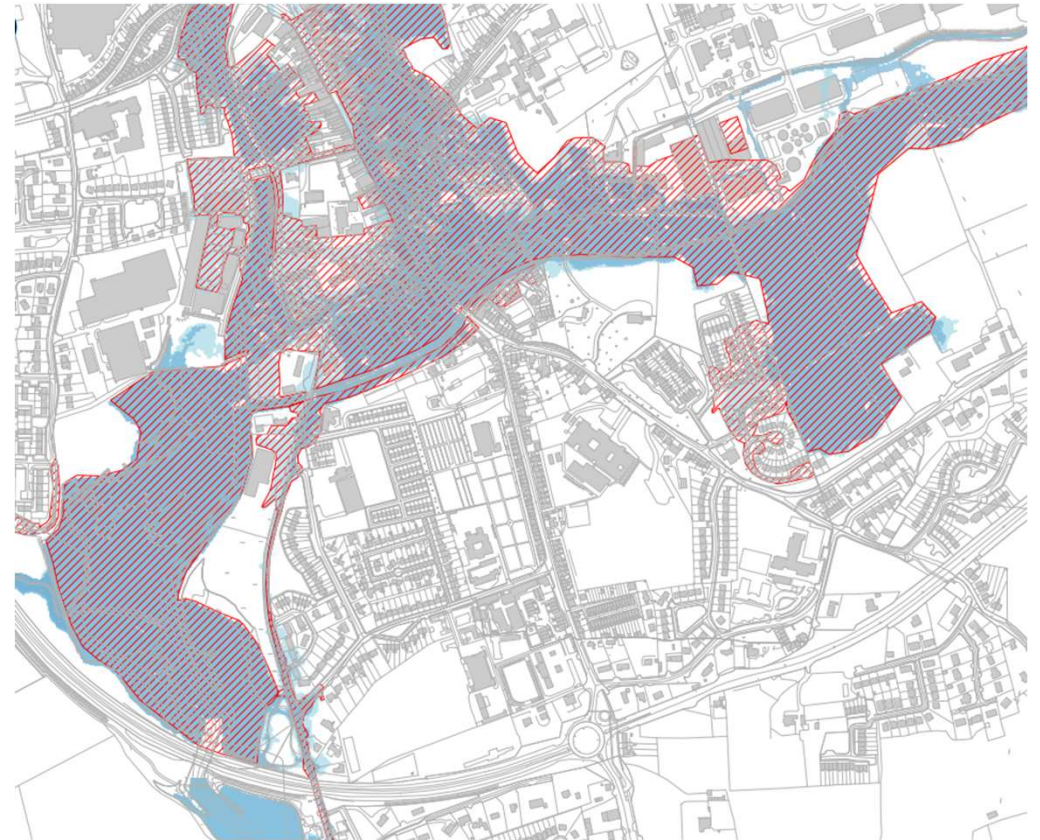
- Post flood event report prepared by Arup to consider the impacts of Storm Babet;
  - Findings from site walkovers undertaken by Arup, CCC and OPW on 19<sup>th</sup> and 20<sup>th</sup> October
  - Review of event hydrology and rainfall data
  - Review of flood mechanisms
- 395 residential properties & 286 commercial properties affected in Midleton
- Flood mechanisms and extents align well with those predicted by the hydraulic modelling for the FRS
- Report is available on the Midleton FRS website (<https://www.floodinfo.ie/frs/en/midleton/project-info/project-documents/>)





# Additional Storm Babet Assessment

- Follow on report is being finalised at present, this will examine:
  - Design Hydrology for the FRS
  - Estimate of return period for Storm Babet (i.e. a “1-in-XXX year” event)
  - Assessment and update as necessary of the preferred scheme; this may include some increases to defence extents and heights.
  - Assessment of the performance on the updated preferred scheme if an event with magnitude of Storm Babet were to occur again.



## Countywide Impact of Storm Babet



- Countywide the overall impact of storm damage is estimated €63m to €68m
  - **National Roads countywide – Estimated at circa €16m**
  - **Non-National Roads countywide (incl bridges) – Estimated €50m to €55m**
  - **Emergency Response & Cleanup costs €4.42m**
- Funding requests submitted to NDFEM (€4.42m), Department of Transport (€55m), and TII (€16m).
- A dedicated implementation team has been established to deliver the programme.
- The proposed programme of repair works is subject to formal funding confirmation from government. C
- Road repairs/ reconstruction is being progressed by Cork County Council as a top priority.

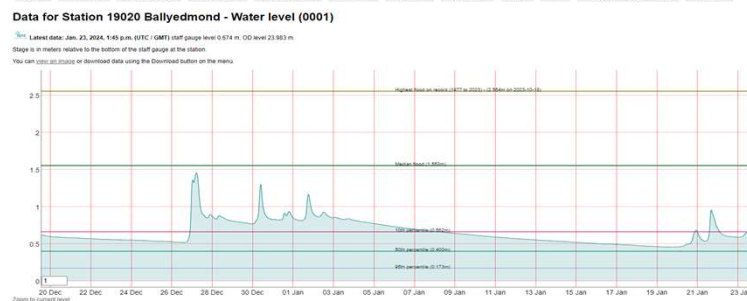


Cork County Councils current proposed programme/phasing of works for Regional & Local Road Repair Works is as follows:

- **Tranche 1 (€6m Estimate) – Q1 - 2024**
- **Tranche 2 (€8m Estimate) – Q2/Q3 - 2024**
- **Tranche 3 (€6m Estimate) – Q3/Q4 - 2024**
- **Tranche 4 (€6m Estimate) – Q1 - 2025**

# Interim Works – progress to date (1)

- Roll out of interim measures is underway in a phased manner, in compliance with the regulatory frameworks; the following has been completed:
  - Removal of fallen trees in channel downstream of Moore’s Bridge
  - Drone survey has been completed – this did not identify any other locations where trees are in channel
  - River level monitoring gauge has been installed at Tir Cluain Bridge and is live; 2 further gauges to be installed in coming weeks
  - Ballyedmond Gauge is providing real-time data (<https://waterlevel.ie/0000019020/>)





## Interim Works – progress to date (2)



- We are continuing to engage with Inland Fisheries Ireland and Dept of Env, Communications & Climate in relation to instream works.
  - The appropriate season to carry out such work is during the 'In Stream Season' (typically July –September inclusive); outside of this season, a derogation is required.
  - Arup are assessing the hydraulics in the relevant location to determine whether removal of the gravels will mitigate flood risk.
  - If deemed appropriate, CCC/OPW will make an application to the Dept for a derogation to work outside of the requirements of the Fisheries Act.
- Carrigogna Bridge Watermain diversion – ground investigation works will be completed here in the coming weeks; procurement of design services will follow
- OPW Hydrometric Section are progressing installation of additional river gauges upstream on the Owenacurra and on the Dungourney
- Significant efforts have been made in terms of jetting, clearing and inspecting drainage networks

## Interim Works – progress to date (3)



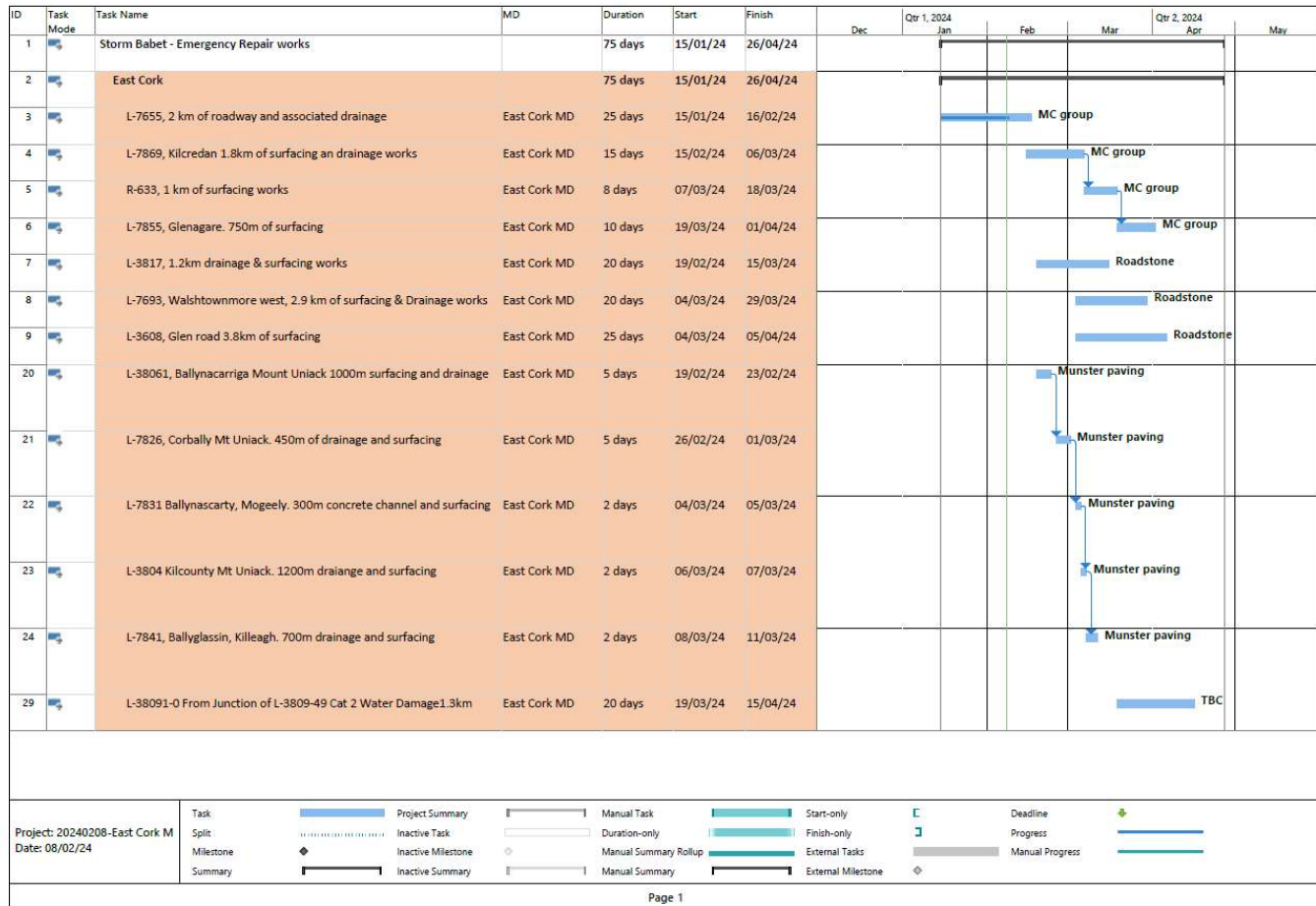
- **Vegetation clearance (removal of overhanging limbs) will be carried out by end of February at locations on the Owenacurra**
- **CCC is continuing to engage with landowners in relation to the removal of bridges on the Owenacurra. Funding has been secured for these removals.**



## Storm Babet - Tranche 1 - Progress Update

- Storm Babet Implementation Unit (SBIU) mobilised,
- Initial Storm Damage Surveys completed,
- Detailed Surveys ongoing,
- Tranche 1 Programme of Works finalised and submitted to DOT,
- Tendering and Procurement processes ongoing,
- Detailed design ongoing,
- Site Assessments ongoing (Flood Assessment Checklists, Environmental Surveys, Condition Surveys etc)
- Tranche 1 Works underway – Road Operation Teams mobilised including Contractors.

# Storm Babet - Tranche 1 (Q1) – Works Programme for East Cork MD



**Tranche 1 Cost Estimate for East Cork MD = €2.9m**

# Temporary Repairs - Barnaviddane Bridge near Inch





# Permanent Repair - Monavarnoge Bridge, north of Inch.





# Drainage Works - L-7631 Pigeon Hill





# Inch/Mount Uniacke Area

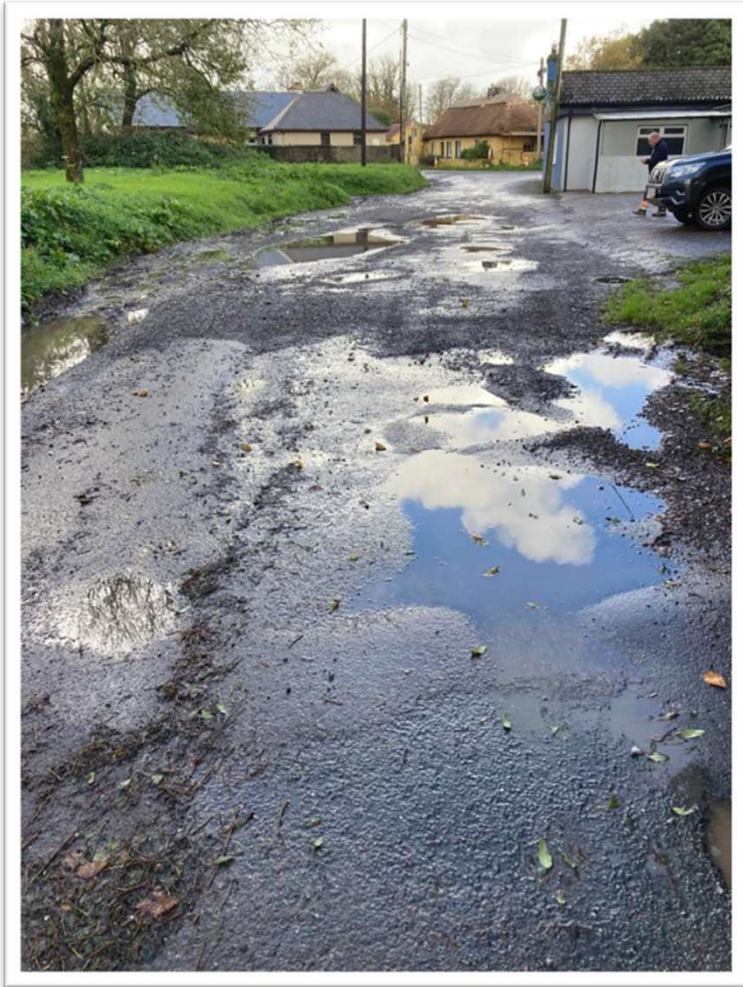


# Inch/Mount Uniacke Area





# Inch/Mount Uniacke Area





# Ladysbridge– Repairs Complete

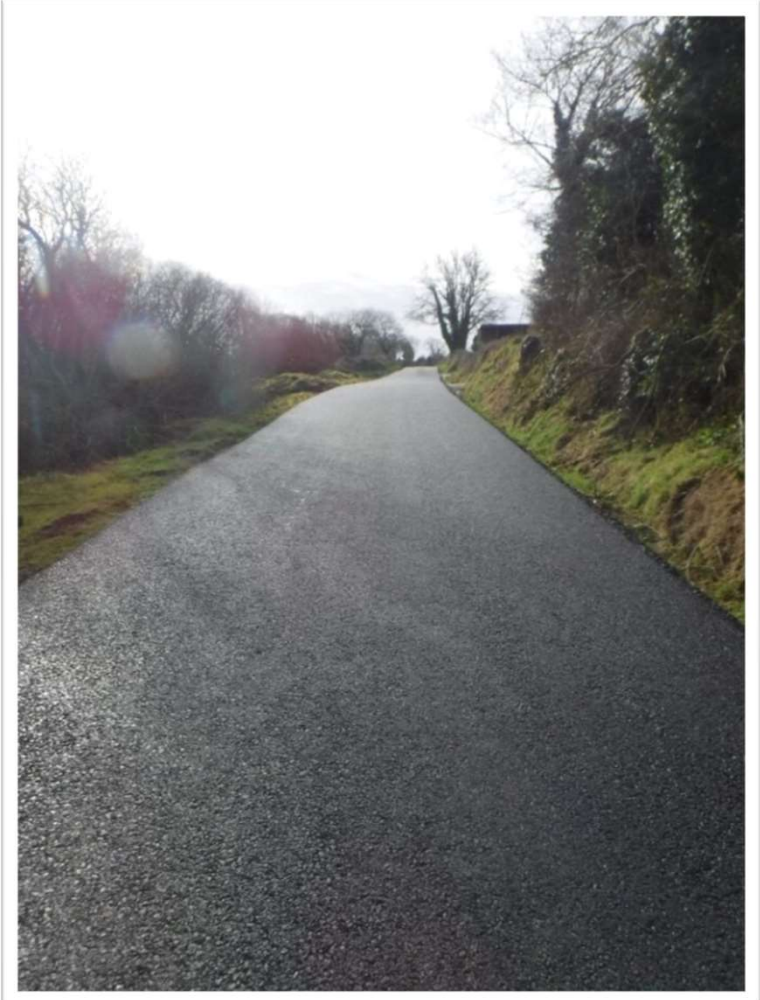


# Works at Ballymacoda, Kilcreddan & Cloyne





# Works at Ballymacoda, Kilcreddan & Cloyne



# Midleton Flood Emergency Response Plan (1)

- Midleton Flood Emergency Response Plan is in place, Version 2.0 dates from December 2020
- Outlines key actions to be taken in advance of and during various levels of flood events, including but not limited to:
  - Visual inspections of key gullies/trash screens
  - Deployment of mobile pump to key locations (e.g. Baby Walk)
  - Liaison with An Garda Síochána
  - Mobilisation of ‘flood watch’ crew
  - Road closures in conjunction with AGS
  - Deployment of crews to fill sand bags
  - Issue of alerts to the public via MapAlerter

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CORK COUNTY COUNCIL



Midleton Town & Environs Flood Emergency  
Response Plan

Date:	December 2020
Version	2.0
Prepared By:	Dave Clarke SEE / Janette Kenny EE
Approved By:	MEMC Flooding Sub-Group

# Midleton Flood Emergency Response Plan (2)



- **Cork County Council have been coordinating with the Principal Response Agencies as part of the operational debrief of the flood response activated in Midleton.**
- **Update of existing plan has been ongoing since September 2023 to comply with the 2022 Framework for Major Emergency management – A Guide to Flood Emergencies.**
- **Lessons learnt from Storm Babet will be incorporated into this update**





# Establishment of Midleton Flood Committee

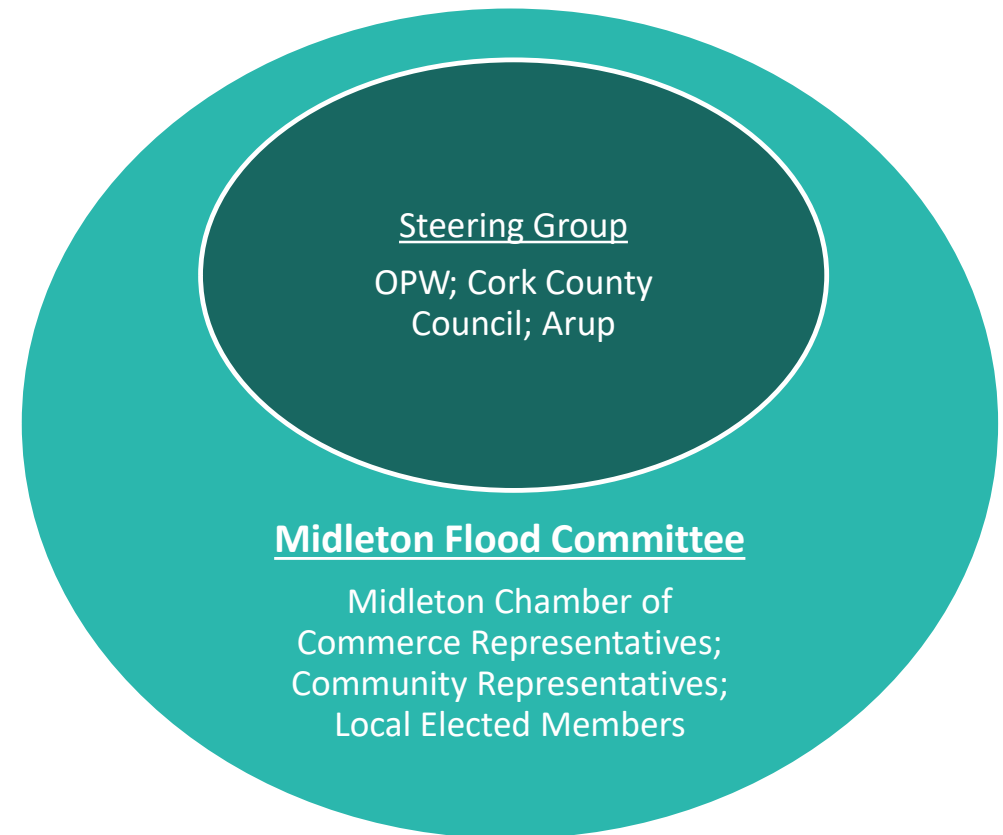


## Midleton FRS Steering Group:

- OPW – Ireland’s lead agency for Flood Risk Management, Funding Authority for the FRS,
- Cork County Council – agent of the OPW for the delivery of the FRS, Contracting Authority
- Arup – Engineering and Environmental Consultants for the FRS

## Midleton Flood Committee:

- OPW, Cork County Council & Arup, together with representatives from the Midleton Chamber of Commerce; Local Elected Members and Community Representatives



# Purpose of the Committee



**Enhance communications between the Flood Relief Scheme Steering group and the community of Midleton**



**Assist in keeping residents and business owners informed of progress on interim measures in the short to medium term**



**Allow for open dialogue with and input from the general public**



**Inaugural meeting held on January 24th**

# Items planned for next quarter



- **Interim works:**
  - **Procurement of Contractor to carry out vegetation clearance**
  - **Engagement with landowners with a view to removal of bridges**
  - **Potential application for derogation from requirements of Fisheries Act**
  - **Installation of additional gauges**
  - **Publication of Arup 2<sup>nd</sup> Storm Babet report – with additional recommendations for interim/advanced works**
- **Main Scheme:**
  - **Continued intrusive Ground Investigation works**
  - **Continued Environmental Surveys**
  - **Utilities Surveys**
  - **Landowner Engagement**
  - **Publication of Options Report and Stage I Final Report**

# Any other business?



**MIDDLETON**  
FLOOD RELIEF SCHEME



Comhairle Contae Chorcaí  
Cork County Council



**OPW** Oifig na nOibreacha Poiblí  
Office of Public Works



Rialtas  
na hÉireann  
Government  
of Ireland

Tionscadal Éireann  
Project Ireland  
**2040**

**ARUP**