

TUAIRISC CHUIG CRUINIÚ NA COMHAIRLE A REÁCHTÁLADH AR AN:
REPORT TO COUNCIL MEETING HELD ON:
27th March 2023

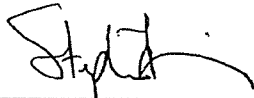
UIMHIR NA MÍRE AR AN CHLÁR / AGENDA ITEM NO: _____

ACHOIMRE AR AN TUAIRISC / SUMMARY OF REPORT:-

Report detailing the proposed 2023 Bridge Strengthening programme in County Donegal. The report provides information regarding the 9 proposed projects which will form Donegal County Councils 2023 Non-National Roads Bridge Strengthening Programme of which €300,000 has been allocated from discretionary maintenance funding. The report also provides information on the recent DoT grant allocation totalling €635,000 for the repair of a further 19 bridges in County Donegal.

CINNEADH ATÁ DE DHÍTH / DECISION REQUIRED:-

Donegal County Council's Bridges Team seek the approval of elected members to implement the proposed 2023 Non-National Roads Bridge Strengthening Programme as published within the attached report.



STIÚRTHÓIR SEIRBHÍSE GNÍOMHACH
ACTING DIRECTOR OF SERVICE

14/03/2023

DÁTA
DATE



**Comhairle Contae
Dhún na nGall**
Donegal County Council

**Report on the proposed
2023 bridge strengthening programme of works**



**Prepared by:
Mark McGloin
Bridges Team**

Road Design Office, Lifford

Document Control Sheet

Client Details	Municipal District - all

Project Title	2023 Proposed bridge strengthening programme
Location	Inishowen, Stranorlar, Letterkenny/Milford, Glenties and Donegal Municipal Districts

Project Ref:	P1146 \ 2023 \ Specialist bridge strengthening
File Path:	Q:\bridges & EIS\Bridges\P1146\2023 proposed strengthening lists
Job Code	7227 8018

Rev.No	Status	Report Date	Author(s)		Approved By	
01	For approval	13 th March 2023	MMG	13/03	CC	

Proposed 2023 Bridge Strengthening Works Programme

Background:

Donegal County Council's 2023 budget includes an allocation of €250,000 for specialist bridge strengthening repair works and €50,000 for preventative maintenance bridge works on non-national roads. In January of this year the Road Design Office bridges team circulated a draft bridge strengthening priority list to each Municipal District for discussion. This was reviewed and amended as necessary and first approved locally by the Roads Municipal District Engineers and subsequently by the local Elected Members at Municipal District level. This programme of works has been developed by selecting the highest priority bridges in each Municipal District.

At present there are 5383 potential bridges identified on Donegal's roads of which 2081 are considered to be significant in size. The Road Design Team has identified 541 bridges in County Donegal that would benefit from structural maintenance, of which 361 are on significantly large structures. The Road Design Office continues to collect information to enable bridge repairs to be targeted towards the bridges in most need. In the past 6 years Donegal County Council has undertaken structural maintenance on 174 damaged bridges.

2023 Specialist Bridge Strengthening Programme:

The Road Design Bridges Team, over the past 7 years has revisited the highest priority bridges on each of the priority lists, conducting over 400 inspections. The team has used this information to prepare and recommended the bridge strengthening priority lists for each Municipal District. These lists were reviewed and amended as necessary by the Municipal District Roads Technical Staff (who have ultimate responsibility for the maintenance of bridges in their functional area) and an agreed 2023 bridge strengthening priority list was formed for each Municipal District. Each bridge on these lists would benefit from specialist strengthening works and consideration has been given to the damage present, the road type and usage in the prioritisation process. The Municipal District Roads Technical Staff then sought approval from their Local Elected members to confirm the 2023 bridge strengthening priority list for each Municipal District. Based on these priorities the Road Design Bridges Team has selected the highest priority bridges in each Municipal District and considered the repairs required to develop this proposed programme of works for County Donegal based on the budget available.

The combined budget for this programme of works is €300,000. The budget has been divided amongst the five Municipal Districts and will repair two bridges in the Letterkenny/Milford, Glenties, Inishowen and Stranorlar Municipal Districts and one larger bridge in the Donegal Municipal District. The bridges proposed for strengthening are the highest priority bridges in each Municipal District. Should savings be made upon the completion of the 2023 Bridge Strengthening Programme then that money shall be used to

repair another high priority bridge within the county. The proposed programme of works for the 2023 specialist bridge strengthening programme is as follows:

Job	Road	Budget	Municipal District
Mullinamuckly	LP-1075	€ 45,000.00	Donegal
Clonbeg	LP-1322	€ 20,000.00	Glenties
Graffy	LP-2613	€ 35,000.00	Glenties
Ballymagahey	L-10923	€ 30,000.00	Letterkenny/Milford
Glashkeelan	L-14623	€ 40,000.00	Letterkenny/Milford
Mount Scourge	LS-6161	€ 25,000.00	Inishowen
Claggan	L-13411	€ 25,000.00	Inishowen
Calhame	LP-1074	€ 50,000.00	Stranorlar
Glen	LP-1264	€ 30,000.00	Stranorlar
Total		€ 300,000.00	

Proposed bridge repairs - Donegal Municipal District

It is proposed to strengthen the highest priority bridge in the Donegal Municipal District. The proposed total expenditure is €45,000. The proposed repair is:

- Mullinamuckly (5044) – Repair bridge then strengthen arch with gunite and grout. Rebuilding of parapet walls is to be completed as part of works.

Proposed bridge repairs - Glenties Municipal District

It is proposed to strengthen priority the two highest priority bridges in the Glenties Municipal District. The proposed total expenditure is €50,000. The proposed repairs are:

- Graffy (166) – Repair bridge then strengthen arch with gunite and grout.
- Clonbeg (6588) – Repair wing walls and parapets.

Proposed bridge repairs – Letterkenny/Milford Municipal District

It is proposed to strengthen the two highest priority bridges in the Letterkenny Municipal District. The proposed total expenditure is €70,000. The proposed repairs are:

- Ballymagahey (7341) – Repair bridge then strengthen arch with gunite and grout. Rebuild parapet walls
- Glashkeelan (2282) – Repair bridge then strengthen arches with gunite and grout.

Proposed bridge repairs - Inishowen Municipal District

It is proposed to strengthen the two highest priority bridges in the Inishowen Municipal District. The proposed total expenditure is €50,000. The proposed repair is:

- Claggan (2120) – Repair bridge then strengthen arch with gunite and grout. Rebuild parapet walls
- Mount Scourge (2118) – Repair bridge then strengthen arch with gunite and grout.

Proposed bridge repairs - Stranorlar Municipal District

It is proposed to strengthen the two highest priority bridges in the Stranorlar Municipal District. The proposed total expenditure is €80,000. The proposed repair is:

- Calhame (2120) – Replace bridge with a large diameter pipe.
- Glen (101) – Repair bridge then strengthen arch with gunite and grout.

Timing of works:

Upon receipt of an approved programme of works, the Road Design Bridges Team shall prepare detailed design drawings and tender documentation for these essential repairs. They will then procure suitably qualified contractors for the works at the earliest possible opportunity.

Subject to approvals, the construction works will be undertaken between May and September which is the only permitted time for working in watercourses for ecological reasons. This coincidentally is the most appropriate time to undertake bridge works as water flows are generally lower during this period. This helps improve the quality of workmanship, has health and safety benefits and helps protect fish stocks as it is not within the main spawning period. Where the works are undertaken by contract, the Road Design Bridges Team shall supervise the construction work on site to ensure the highest quality of workmanship is achieved. Where the works will be undertaken by direct labour, the Bridge Team shall provide technical support and guidance.

Other programmes - Regional road bridge rehabilitation programme

In addition to the proposed programme of works, the Road Design Office on behalf of Donegal County Council applied for funding from the Department of Transport in October 2022 and was awarded a grant of €635,000 for the structural repair of nineteen bridges on high priority roads.

These works are in addition to the works proposed under the 2023 Non-National Road Specialist Bridge Strengthening Programme for which approval is sought. The Road Design Office Bridges Team is currently in the process of preparing detailed design drawings and tender documentation with a view to tendering the works as soon as is practical and undertake the remedial works during the summer months. The list of approved bridges is:

Job	Road	Budget	Municipal District
Lacklea Bridge	R253	€ 35,000.00	Glenties
Assaranca (Maghera)	L-2843	€ 70,000.00	Glenties
Drumnalough (Altar)	L-2683	€ 50,000.00	Glenties
Meenagran bridge	R262	€ 15,000.00	Donegal
Kilcar	R263	€ 35,000.00	Donegal
Meenaneary Hill	L-1075	€ 15,000.00	Donegal
Hillhead	L-2225	€ 15,000.00	Donegal
Meensheffin	R232	€ 25,000.00	Donegal
Lettertreane	L-1685	€ 30,000.00	Donegal
Ballybrolaghan	R262	€ 20,000.00	Donegal
Arbatt	L-6283	€ 70,000.00	Stranorlar
Legnatraw	R236	€ 70,000.00	Stranorlar
Knockbrack	L-1064	€ 30,000.00	Letterkenny/Milford
Newbridge	R268	€ 25,000.00	Letterkenny/Milford
Meenacung West	R250	€ 25,000.00	Letterkenny/Milford
Sruhangerrow	R254	€ 20,000.00	Letterkenny/Milford
Bunagee	L-1114	€ 25,000.00	Letterkenny/Milford
Drumbarnet	L-5064	€ 30,000.00	Inishowen
McCarrons	L-6831	€ 30,000.00	Inishowen
Total		€ 635,000.00	

Recommendation

It is recommended that the elected members approve the 2023 Non-National Roads Specialist Bridge Strengthening Programme as published herein.

Prepared and recommended by



Mark McGloin, EE, Road Design

Date: 13th March 2023

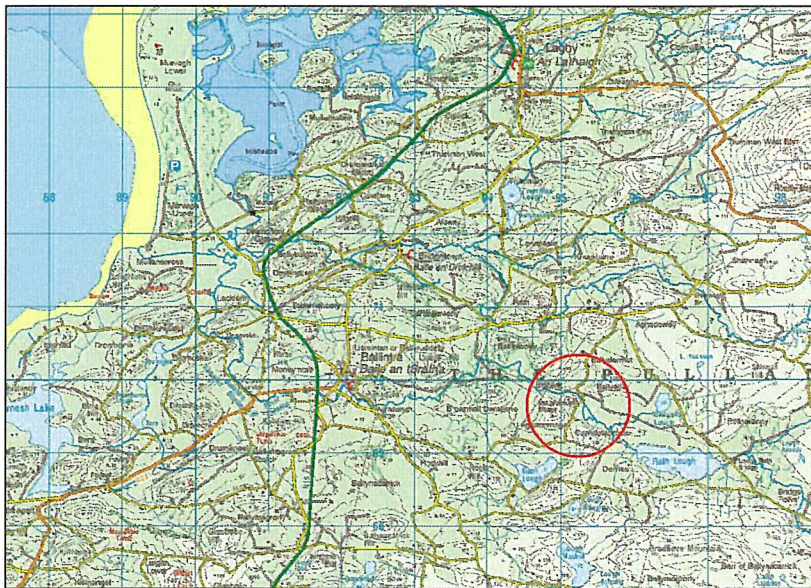
Approved by



Clíodhna Campbell, Senior Engineer, Road Design

Date: 13th March 2023

Mullinamuckly Bridge



Location plan for Mullinamuckly Bridge

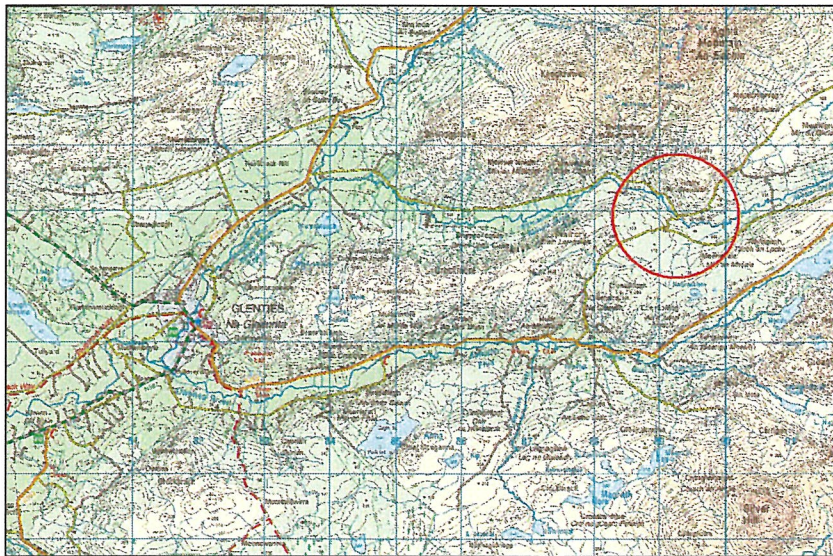


The bridge

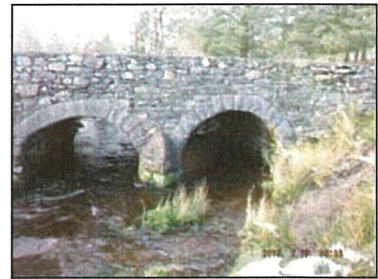


Gaps in arch abutments

Graffy Bridge



Location plan for Graffy Bridge

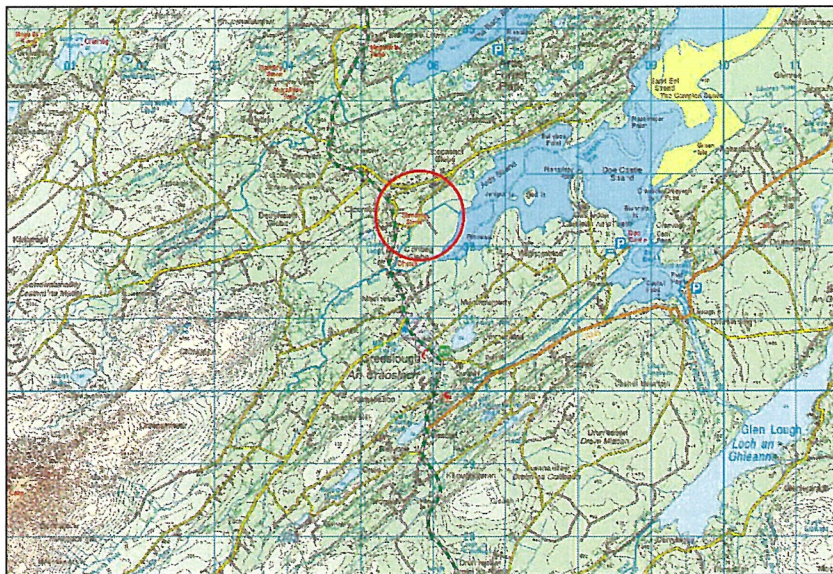


The bridge



Section of arch separating

Clonbeg Bridge



Location plan for Clonbeg Bridge

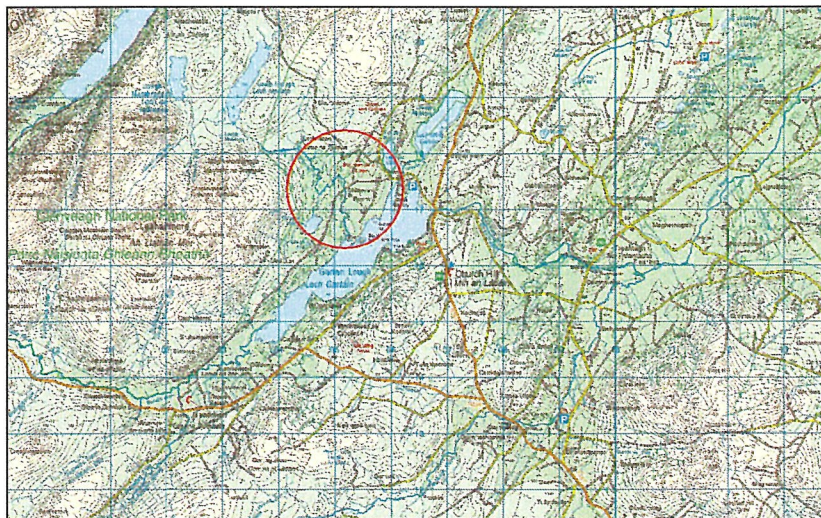


The bridge



Wing wall displacement

Glashkeelan Bridge



Location plan for Glashkeelan Bridge

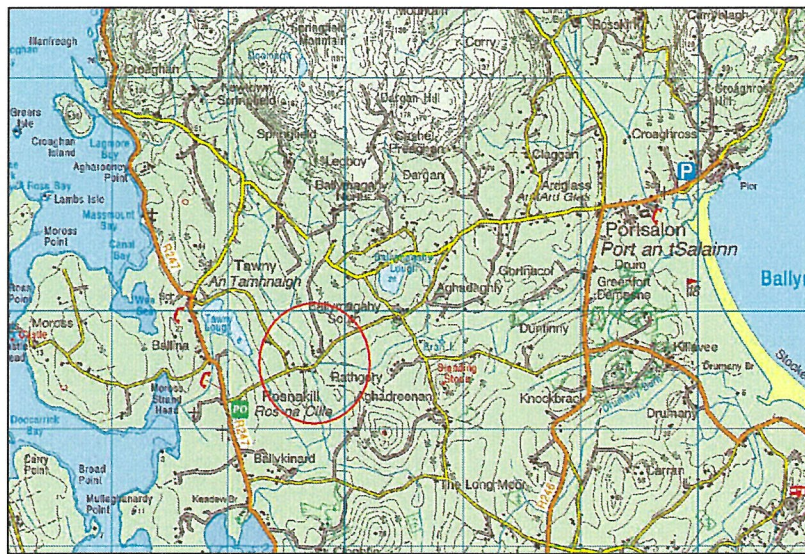


The bridge



Stones dropping in soffit.

Ballymagahy Bridge



Location plan for Ballymagahy Bridge

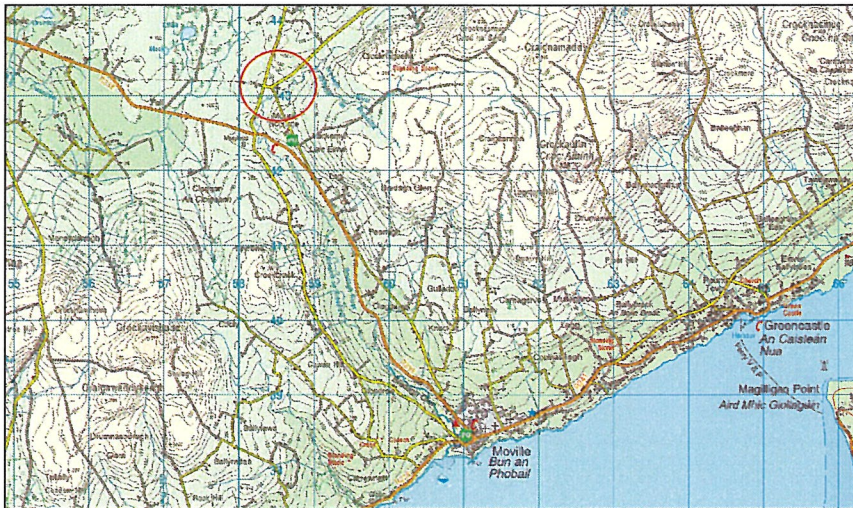


The bridge



Hole in abutment and deck

Mount Scourge Bridge



Location plan for Mount Scourge Bridge

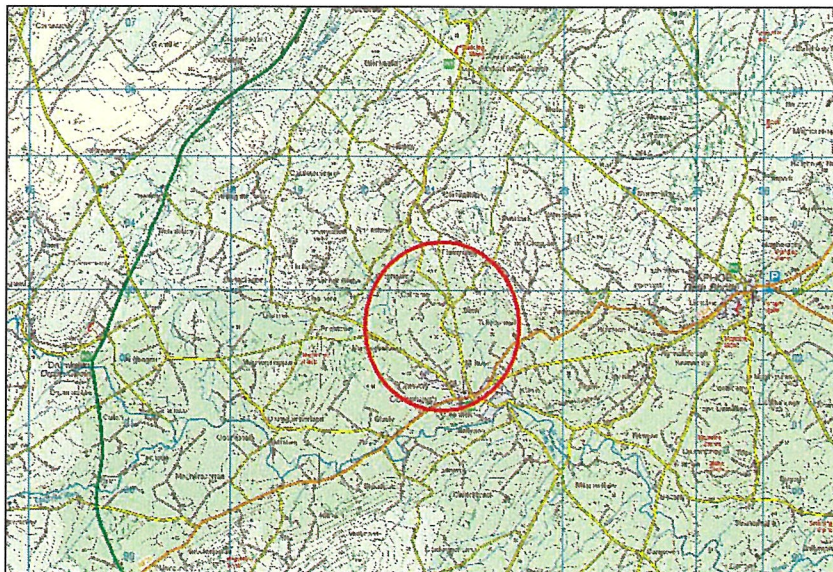


The bridge

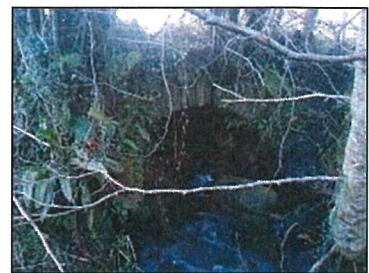


Structural cracks

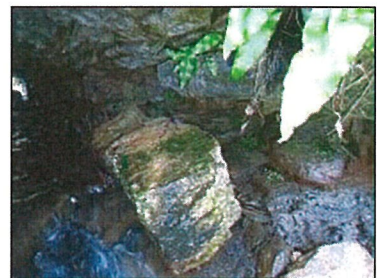
Calhame Bridge



Location plan for Calhame Bridge

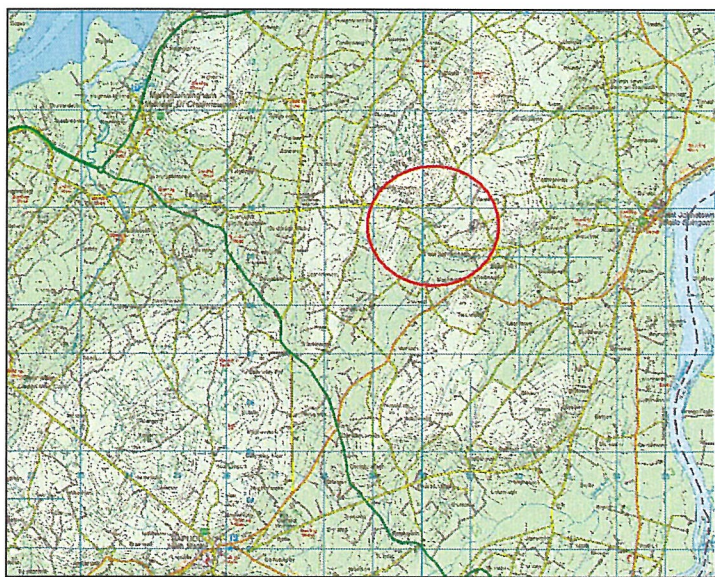


The bridge

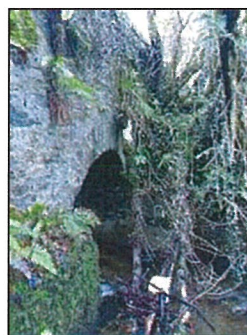


Abutment damage

Glen Bridge



Location plan for Glen Bridge



The bridge



Deck and arch damage