The Highland Council

Agenda Item	8
Report No	ECI/37/25

Committee: Economy and Infrastructure

Date: 13 November 2025

Report Title: Road Structures Annual Report 2025

Report By: Assistant Chief Executive - Place

1 Purpose/Executive Summary

1.1 This report provides an outline of the Council's road bridge stock, its condition, the bridge inspection regime, and the works associated with maintaining road structures.

It provides recommendations and updates on projects to be included in the 'Major Bridges' line and the 'Bridges, Retaining Walls and Culverts' line of the Roads and Infrastructure Capital Programme.

2 Recommendations

- 2.1 Members are asked to:
 - i. **Note** the current position in Highland in relation to the number of structures inspections undertaken as in section 6.2;
 - ii. **Note** the position of the Bridge Stock Condition Indicators in Highland as in section 7;
 - iii. **Note** the risks that are carried by the Council in relation to its road structure as in see section 3.3; and
 - iv. **Note** that due to insufficient funding for bridge schemes, some structures are to be put into 'managed decline' leading to eventual closure as in see section 9.7.

3 Implications

3.1 **Resource** – Funding for bridges comes from the Council's Capital Programme. The current agreed five-year programme for 2024/25 to 2028/29 includes an allocation of £21.091m for bridges. In addition, the Area Roads Capital Programme includes an allocation of £650k for 2025/26.

There is a shortage of funding for bridges. Not all desirable projects can currently be afforded. A prioritised list of schemes is given **Appendices 1 and 2** together with an indication of which projects are currently affordable. Due to the shortage of funding, some structures on the prioritised list will be put into 'managed decline' as in 9.7).

- 3.2 **Legal** The Council is required as a local roads authority under the Roads (Scotland) Act 1984 to manage and maintain all public roads in its area including structures (bridges, etc.).
- 3.3 **Risk** The Council currently carries risks in relation its road structures stock. The aim of this section is to elaborate on these risks.

Listed below are the main categories of risk carried by the Council in relation to its structures stock. Work is continuing to improve the gathering and recording of data from inspections with a view to better quantifying these risks. Due to resource constraints, and the timeframe over which the full inspection cycle runs, it is likely to be well over ten years before some of the risks below can be reasonably quantified. The present report is therefore limited to a qualitative treatment of those risks.

The main categories of risk that exist in the Council's structures stock are:-

Confirmed sub-standard structures without mitigation

These are structures that have been confirmed, either by structural assessment or by virtue of an obvious defect, as being unable to carry full traffic loading whilst maintaining the requisite factor of safety. If no mitigation, such as a weight restriction, is imposed then the structure must be considered to be operating with a sub-standard factor of safety. Examples of structures that fit this category would be some bridges on locally significant roads which provide the only link to communities, and have failed assessment, but where no weight limit has been imposed due to the disruption it would cause.

Provisionally sub-standard structures

These are structures where it is suspected that if a structural assessment were carried out, they would be deemed sub-standard. The nature of the risk is the same as for confirmed sub-standard structures, described above.

Emerging Liabilities

This category of risk covers structures that are likely to need significant refurbishment work or replacement before the forecast funding allows us to address them. The risks associated with these structures are of future deterioration leading to weight restrictions, closure or collapse. Some of the schemes described in **Appendix 3** are unfunded and thus fall into this category of risk. This risk can be best addressed by increasing the budget allocation for bridge replacement or major works.

Structures with sub-standard parapets

This category of risk is for structures where the parapets are sub-standard. The risks associated with sub-standard parapets include increased potential for vehicle incursion and injury to occupants. It is suspected that this risk exists at a high proportion of Highland structures, but the extent is not yet quantified. A process for assessing and eventually quantifying this risk is currently in development.

Structures susceptible to scour

This category of risk is for structures with increased potential of collapse due to undermining of the foundations. A process for assessing and quantifying this risk is currently in development.

- 3.4 Health and Safety (risks arising from changes to plant, equipment, process, or people) An update is planned to the inspection procedure, OP 708, which will improve the way cattle grid inspections are managed and programmed.
- 3.5 **Gaelic** No known Gaelic implications arise as a direct result of this report.

4 Impacts

- 4.1 In Highland, all policies, strategies or service changes are subject to an integrated screening for impact for Equalities, Poverty and Human Rights, Children's Rights and Wellbeing, Climate Change, Islands and Mainland Rural Communities, and Data Protection. Where identified as required, a full impact assessment will be undertaken.
- 4.2 Considering impacts is a core part of the decision-making process and needs to inform the decision-making process. When taking any decision, Members must give due regard to the findings of any assessment.
- 4.3 This is an update report and therefore an impact assessment is not required.

5 Highland Council Road Structures Information

5.1 This report relates only to road structures (bridges, culverts and retaining walls) that are part of the public road network maintained by the Council. This includes cattle grids and some footbridges remote from roads.

The following categories of structure are not covered by this report:-

- Pipes and small culverts, which are too small to class as a structure;
- Structures maintained by parts of the Council other than the roads service;
- Structures on Council roads, but which other authorities are responsible for; and
- Trunk road structures
- 5.2 The table below shows the numbers and types of road structures the Council is responsible for:-

Structure Type	Quantity
Road Bridges	1735
Footbridges	35
Unusual Structures	103
Retaining Walls	1077
Culverts	454
Cattle Grids	593
Total	3997

(Note: the majority of 'Unusual Structures' are listed bridges, with three being post tensioned bridges).

6 Inspections

6.1 **Inspection procedure** - Road structures are subject to routine inspection in accordance with the Council's Structures Inspection Policy.

6.2 **Principal and general inspections** – The following table summarises the progress on the inspection of bridges, culverts and retaining walls for the current year, 2025/26:-

Routine Inspections of Bridges, Culverts and Retaining Walls (≥ 3m span for bridges and culverts or ≥ 5m height for retaining walls)								
Scheduled	Due in 2025/26	Inspected	% Inspected					
Inspections		(at 09/10/2025)	(at 09/10/2025)					
PI	117	64	54.7%					
GI	GI 518 402 77.6%							
Totals (PI + GI) 635 466 73.4%								

GI = General Inspection (a visual inspection, usually by a Structures Technician).

PI = Principal Inspection (a more detailed inspection, by the Structures Team).

Progress on PIs and GIs is satisfactory for the time of year.

6.3 **Basic safety inspections for minor structures** – For minor structures (bridges and culverts <3m span and retaining walls <5m high) a less intensive inspection regime is employed, comprising occasional basic safety inspections. Due to a shortage of inspectors in previous years, a backlog has developed of these basic inspections on minor structures. Due to the improved progress on routine inspections (PIs and GIs), work started in 2025/26 on addressing the backlog of scheduled safety inspections on minor structures. The following table summarises this progress:-

Inspections of Bridges, Culverts and Retaining Walls (< 3m span for bridges and culverts or <5m height for retaining walls)										
Scheduled Inspections	Scheduled Backlog of Inspected % Inspected									
Basic safety inspections	Basic safety 602 146 24.3%									

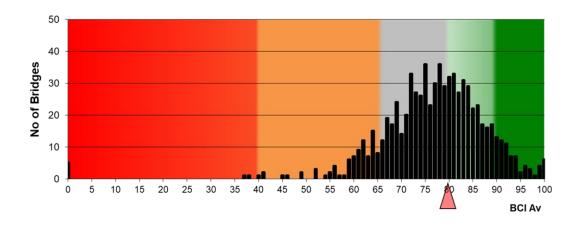
6.4 **Special inspections** – In addition to the routine inspection programme, special inspections are occasionally required in response to incidents or concerns raised. The number of such inspections is not currently recorded.

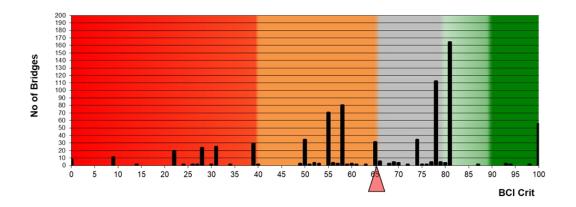
7 Bridge Stock Condition

- 7.1 A routine principal or general inspection generates condition scores for each element of the bridge. From these scores, two Bridge Condition Indices (BCI) are calculated for each bridge; average ('BCI avg') and critical ('BCI crit'):-
 - 'BCI avg' score is based on the average condition of the whole bridge; and
 - 'BCI crit' score is based on the worst condition of the main structural elements.

The average of the BCI scores for every bridge in the Council's bridge stock gives the Bridge Stock Condition Index (BSCI), an indicator of the overall condition of the Council's bridge stock, with a score from 0 (bad) to 100 (good). The BSCI values vary with time as inspections are carried out and data is updated.

The current Highland BSCI avg is 79.31 and BSCI crit is 66.27 The following charts illustrate the distribution of BCI scores for the Council's bridges:-





8 Performance Indicators

8.1 The following table shows key performance indicators for Highland Council Structures, together with a comparison against averages for the SCOTS family group (rural) and Scotland as whole.

Performance Indicators for Highland Council Structures									
		Highland	Family	Scot-					
APSE/ SCOTS PI	2021/	2022/	2023/	2024/	Group	land			
	22	23	24	25	Avg.	Avg.			
% of PIs carried out on time	96.8	92.5	48.9	100	67.7	62.1			
% of GIs carried out on time	100.0	54	53.5	97.0	83.1	84.7			
BSCI average	78.8	79.5	78.7	79.3	83.5	86.7			
BSCI critical	64.7	65.7	65.2	66.3	71.7	76.2			
% of Council bridges failing	11.4	9.7	9.7	9.7	3.41	2.2			
EU standards	11.4	9.1	9.1	9.1	3.41	2.2			
% of Council road bridges									
with unacceptable weight,	0.2	0.2	0.2	0.2	0.4	1.4			
height or width restriction									

Notes on the performance indicators:-

- 1. APSE = The Association for Public Service Excellence.
- 2. SCOTS = The Society of Chief Officers of Transportation in Scotland.
- PI = Principal Inspection, GI = General Inspection; a higher % complete is a better result.
- 4. BSCI = Bridge Stock Condition Indicator (a numerical score out of 100 representing of the overall condition of the Council's bridge stock); a higher score is a better result.
- 5. % failing standards and % with unacceptable restrictions; a lower % is better.
- 6. The 2024/25 data are provisional until published by APSE.

9 Works Programmes

- 9.1 Works on Council Road structures can be considered to fall into five streams, depending upon funding source:-
 - Minor works and maintenance as in 9.2;
 - Small and medium schemes as in 9.3;
 - Major bridge schemes as in 9.4 to 9.7;
 - Other schemes as in 9.8; and
 - Third party schemes as in 9.9

9.2 Minor works and maintenance

Minor works and maintenance of road structures are managed by local Roads Area offices and are funded from their individual revenue budgets, reported separately.

9.3 Small and medium schemes

Small and medium schemes are funded from the 'bridges, walls and culverts' line under the Roads service's capital budget. The Road's service total capital allocation for 2025/26 is £21.15m (figure extracted from Committee Report $\frac{HC/05/24}{4}$, agreed at Full Council meeting on 14 March 2024). The part of this available for bridges, walls and culverts for 2025/26 is £650k (which is allocated from the base capital budget of £7m). In the $\frac{HC/19/24}{4}$ report, a further £600k was allocated as part of the Area capital budgets to enable them to replace or repair minor structures, giving a total allocation of £1.25m.

The prioritisation list

The Structures Section maintains a prioritised list of schemes for this budget. This is not intended to be a strict order in which schemes will be progressed but provides indicative priorities for programming. New schemes are added from time to time as conditions change. A full copy of the list is given in Table 1.1 in **Appendix 1** of this report. The backlog of work on the list currently stands at £10.575m.

Schemes not on the prioritisation list

Schemes are sometimes progressed under this budget without being on the prioritisation list. The reasons for this may be to leverage funding opportunities or to address urgent repairs after an incident. A list of such schemes is given in Table 1.2 of **Appendix 1** of this report.

9.4 Major bridge schemes – overview

Major bridge schemes are funded from the Council's current five-year capital programme, 2024/25 to 2028/29, published in committee report <u>HC/31/23</u>, agreed at the full Council meeting on 14 September 2023. The total allocation for major bridges in the programme is £21.1m.

A prioritised list of approved and proposed major bridges is given in **Appendix 2**. The amount of work on the list currently stands at £102.5m.

9.5 Major bridge schemes – update on 'named' projects

Updates on live 'named' projects as of October 2025:-

- A836 Naver Bridge replacement: Construction commenced in July 2024, and completion is expected in early 2026. Progress is satisfactory, but costs have exceeded the budget allowed in the five-year capital programme. If no other source of funding is found, the shortfall will be made up by reducing the number of bridge projects started under the other major bridges line of the capital programme.
- Infirmary Bridge Repairs: The bridge is shut, and emergency hanger repairs are currently underway following a turnbuckle failure in August 2025. A major refurbishment or replacement is still required. Some of the budget in the capital programme remains to carry out further limited repairs, but only sufficient to address short term safety concerns. Beyond the short term, further funding is required to enable refurbishment or replacement.

9.6 Major bridge schemes – update on other (not named) projects

Updates on live projects under 'other major bridges' line:-

- A836 Bonar Bridge Repainting: Structural assessment work is underway to determine how the bridge may be safely encapsulated (wrapped in sheeting, whilst avoiding excess wind loading). Repainting is expected to take place in 2026 or 2027.
- **B861 Ness Bridge:** Preparations are currently underway to carry out a remediation and maintenance scheme on this bridge. Works are expected to take place in summer or autumn 2026.
- **A890 Strathcarron Bridge:** A feasibility study is currently underway to investigate options for strengthening or replacing the 1930s concrete bridge carrying the A890 over the river Carron. Results of the study are expected in spring 2026. There is currently insufficient money in the agreed five-year capital programme (2024/25 to 2028/29) to carry out works.

9.7 Major bridge schemes – managed decline

Due to the shortage of funding, it is proposed to put the following two structures into managed decline:-

- C1152 Spey Bridge Cromdale, near Grantown on Spey.
- U2400 Slochd Cottages Railway, near Carrbridge.

This means that the identified major schemes in **Appendix 2** for these structures will not be started, and the structures eventually closed. (Slochd Cottages Railway is already closed and requires a major scheme to allow reopening).

9.8 Other schemes

This category comprises schemes that are not funded from the Council's capital programme, but from other sources such as government grants, or damages paid after an incident. There are currently no schemes funded by grant money. In recent years, bids into the Strategic Timber Transport Fund have resulted in additional bridge replacements, although this match funding cannot be guaranteed for future projects.

9.9 Third party schemes

Third party schemes are works on Council bridges carried out by others such as wind farm developers. Several such schemes may be carried out in a typical year. In all cases, the Council Structures Section carries out the role of Technical Approval Authority to ensure that designs meet the required standard for public roads.

10 Structural Assessments

10.1 **Assessments – purpose**

A structural assessment is a theoretical calculation of the load carrying capacity of a structure. Assessments are required when a structure is suspected to be substandard, and the outcome will influence decisions on capital expenditure and works. These are different to inspections which identify defects. Assessments are not required for every load carrying structure and the programme will be determined on a technical needs' basis. Depending on the result of an assessment, restrictions such as a weight limit may need to be imposed on a structure prior to any further capital improvement works.

10.2 **Assessments – funding**

At present there is no additional funding for assessments and therefore they need to be undertaken from existing budgets. However, some assessments are undertaken each year as an essential part of a Council structures scheme or a private development.

11 Emergency Bridging

11.1 Emergency bridging – purpose

The Council holds a stock of emergency portable bridges, which can be deployed if a bridge fails unexpectedly.

11.2 Emergency bridging – stock

The emergency bridge stock comprises a variety of proprietary bridge types in a range of spans up to about 15 metres. Due to the increased costs of longer spans, and the smaller proportion of such bridges on the network (approximately 15% are greater than 15m), it is not considered economical to keep emergency stock for bridges longer than this. Due to deployments in recent years, the stock is now running low with two bridges remaining.

11.3 Emergency bridging – proposals

Given the importance of maintaining emergency bridge stock, we consider it necessary to spend up to £0.5m to purchase more stock. Funding will be discussed at the next Structures capital board. If required, a further paper will be presented to committee.

Designation: Assistant Chief Executive – Place

Date: 6 October 2025

Author: Andrew Tryon – Principal Engineer (Structures)

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Background Papers: <u>TEC 77/13 Cattle and Deer Grids Policy</u>

COM 58/15 Bridges and Road Structures
ECI 38/20 Road Structures Annual Report
ECI/53/2021 Road Structures Annual Report
ECI/33/22 Road Structures Annual Report
ECI/63/2023 Road Structures Annual Report

ECI 18/20 Strategic Timber Transport Scheme 2020/21 HCI/31/23 Capital Programme Review – General Fund HC/05/24 Place Based Approaches to Strategic Capital

Planning and Asset Management

HC/19/24 The Highland Investment Plan – Next Steps

Appendices: Appendix 1 – Small and medium schemes

Appendix 2 – Major bridges priority list

Appendix 3 – Descriptions for selected major bridge

schemes

Appendix 1 – Small and Medium Schemes

Appendix 1.1 Priority List for Small and Medium Schemes

The following table shows the top priority small and medium schemes. The prioritisation is indicative, and the actual order in which projects are progressed is decided based upon engineering considerations and resource availability.

	1.1 S	mall and medium	schemes priority list					
							Cum.	
					Priority	Est.	Total	
[2]	No.	Bridge Code	Bridge Name	Area	Score ^[1]	£k	(£k)	Scope of Work
	1	A08320330	POOLEWE	Ross & Cromarty	64.3	260	260	Concrete investigation and repair
*	2	U10440010	AULTVOULIN	Lochaber	63.8	155	415	Deck replacement
	3	U12780050	INSHORE NO 2	Sutherland	63.4	150	565	Cape Wrath road, refurbishment, combine with Daill Bailey
	4	U10310010	AILEIN	Lochaber	62.9	125	690	Redeck (currently steel and timber)
*	5	B08170051	AVERON FOOTBRIDGE	Ross & Cromarty	61.7	420	1,110	Assessment then Repair or Replacement
	6	U28360020	ALLT NA CROITE	Inverness	60.7	125	1,235	Redeck (currently steel and timber)
*	7	C11500020	BRACORA	Lochaber	60.1	85	1,320	Minor bridge deck replacement
	8	B80070120	ALLT FHEARGAIS	Lochaber	59.9	260	1,580	Replacement
*	9	C11500010	LOIN	Lochaber	59.3	85	1,665	Minor bridge deck replacement
	10	U10150040	ALLT DEARG	Lochaber	58.7	155	1,820	Replacement
	11	C11920030	SWORDALE	Lochaber	57.8	105	1,925	Redeck (currently steel beams and corrugated steel deck)
	12	C10940090	SCHOOL	Lochaber	57.6	315	2,240	Replacement
	13	B91540010	MOY	Inverness	56.9	155	2,395	concrete investigation and repair, assessment
	14	U12780030	DAILL BAILEY	Sutherland	56.6	200	2,595	Cape Wrath road, refurbishment, combine with Inshore No 2
	15	C11530080	STOCHD CHULCHARN 2	Lochaber	55.8	125	2,720	Redeck (currently steel and timber)
	16	B80570050	FIREMORE	Ross & Cromarty	55.7	435	3,155	Minor bridge deck replacement
*	17	U19900010	LEALTY	Ross & Cromarty	53.6	345	3,500	Repair and possible widening
*	18	U10150010C60	UNNAMED	Lochaber	53.4	90	3,590	Glen Roy Bridge Deck Replacements
*	19	U10150020	BHREAC ACHAIDH	Lochaber	52.2	90	3,680	Glen Roy Bridge Deck Replacements
	20	A08320270	GRUDIE	Ross & Cromarty	51	260	3,940	Concrete repairs

	1.1 S	mall and medium	schemes priority list					
							Cum.	
					Priority	Est.	Total	
[2]	No.	Bridge Code	Bridge Name	Area	Score ^[1]	£k	(£k)	Scope of Work
*	21	U10150030	NAN EUN	Lochaber	48.7	90	4,030	Glen Roy Bridge Deck Replacements
	22	A08610230	GOUR	Lochaber	48	255	4,285	Repaint, waterproof, resurface, parapet replacement
*	23	U19210010	ACHNAGARRON	Ross & Cromarty	47.8	165	4,450	Repair
	24	B90070040C93	AIRDRIE MILL BURN	Nairn & Cawdor	47.4	210	4,660	Repairs
	25	C12230010	OLD SHIEL	Ross & Cromarty	47	315	4,975	Refurbishment
	26	B90900020	HOWFORD	Nairn & Cawdor	46.6	210	5,185	Steelwork repairs and repaint
	27	U28230010	LOWER FOYERS BAILEY	Inverness	45.7	155	5,340	Redecking of bailey bridge
	28	A08350250	KNOCKAN	Sutherland	45.6	365	5,705	Parapet replacement, concrete investigation
	29	U14230010	ALLT CURRACHAN	Inverness	45.3	330	6,035	Investigate options for repair/replacement
	30	B91610010	LITTLEMILL	Ross & Cromarty	44.4	40	6,075	Tie bar repairs (with Braeintra and Dublin)
	31	A08390010	PITTENTRAIL	Sutherland	43.9	130	6,205	Refurbishment
	32	U32670010	ACHVAICH	Sutherland	43.8	240	6,445	Replace structure. Options study.
	33	A08350270	LEDMORE	Sutherland	43.6	285	6,730	Parapet replacement, concrete investigation
	34	A08320090	GRUDIE	Ross & Cromarty	41.7	210	6,940	Investigation to determine scope of repairs
	35	B91780010	DULNAIN	Badenoch & Strathspey	41.6	315	7,255	Repair of cantilever
	36	U48090010	CHRACAIG	Eilean a' Chèo	40.5	420	7,675	Repair and refurbish
	37	B08510030	ABERARDER	Inverness	38.6	60	7,735	Movement joint replacement, concrete repairs, esp. at pier.
	38	A08610350	CEOL NA MARA	Lochaber	38.3	60	7,795	Masonry repairs
	39	A08620090	LOVAT	Inverness	38.2	215	8,010	Masonry repair and scour protection
	40	U19070010	DUBLIN	Ross & Cromarty	38	40	8,050	Tie bar repairs (with Braeintra and Littlemill)
	41	C10870030	AN UILLT BHIG	Ross & Cromarty	37.2	375	8,425	Strengthening and refurbishment
	42	B09700200	NETHY	Badenoch & Strathspey	37	145	8,570	Repointing
	43	A08380220	KYLE OF TONGUE	Sutherland	36.2	80	8,650	Movement joint replacement
	44	A08550010	RIVER LEASGEARY	Eilean a' Chèo	35.4	430	9,080	Strengthen edge, replace parapet, refurbishment
	45	A08380080	ACHFARY	Sutherland	34.6	575	9,655	Waterproofing and resurfacing, concrete repairs
	46	A08610340	CAMUSCHORK	Lochaber	33.3	60	9,715	Masonry repairs

	1.1 Small and medium schemes priority list											
							Cum.					
					Priority		Total					
[2]	No.	Bridge Code	Bridge Name	Area	Score ^[1]	£k	(£k)	Scope of Work				
	47	A08630140	CAROY	Eilean a' Chèo	30.5	105	9,820	Waterproofing and resurfacing, parapet replacement				
	48	U21040030	SHERRAMORE	Badenoch & Strathspey	29.2	210	10,030	waterproofing / Joints / vegetation				
	49	U10430009	BALLACHTY	Caithness	[3]	125	10,155	Scour repairs				
	50	A08610140	CLADACH	Lochaber	[3]	420	10,575	Propped bridge. Probable replacement				

<u>Notes</u>

- [1] The priority score is out of 100 with higher scores being worse.
- [2] Lines above marked thus '*' indicate projects from this list that are currently in progress.
- [3] Priority scores for structures no.49 and 50 in the above list are not yet calculated.

Appendix 1.2 Small and Medium Schemes NOT on the Priority List

The following table lists bridge schemes that are currently in progress against the bridges, walls and culverts budget, but not included in the priority schemes listed in Appendix 1.1. For each scheme, justification is given below for why it is being progressed ahead of the prioritised list.

Appendix 1.2	Appendix 1.2 Small and medium bridge schemes not on Priority List										
	Est Justification for Progressing Scheme ahead										
Bridge Code	Bridge / Scheme Name	2020 Op Areas	£k	Scope of Work	Normal Prioritisation						
U22390040	DALNAHEITNACH	Badenoch and	30	Replacement of bridge as part of re-	Budget to cover design work with construction						
		Strathspey		naturalisation of landscape	being funded by Cairngorm National Park.						

The amounts above are not scheme totals, but are the amount expected to be funded from bridges, walls and culverts budget.

Appendix 2 – Major Bridges Priority List

The following table shows the top priority major schemes, together with an indication of affordability based on the current five-year capital programme budget of £21.091m for 2024/25 to 2028/29, agreed at full Council on 14 of September 2023, and recorded in Appendices A and B of committee report HC/31/23.

App	Appendix 2.1 Major bridge schemes priority list								
No	Bridge Code	Bridge Name	Area	Priority Score ^[1]	Est £k	Cum Total £k	Scope of Work	Funded?	
1	B08610010	NESS	Inverness	65.7	1,850	1,850	Refurbishment and maintenance	Yes ^[2]	
2	A08900080	STRATHCARRON	Ross and Cromarty	64.1	11,000	12,850	Replacement or refurbishment	Partly ^[3]	
3	F00000020	INFIRMARY	Inverness	62.6	535	13,385	Minimal Refurbishment	Yes	
4	B08630060	KINLOCHLEVEN VIADUCT	Lochaber	61.2	2,550	15,935	Feasibility study and refurbishment	Partly ^[3]	
5	C11520020	SPEY BRIDGE CROMDALE	Badenoch and Strathspey	60.6	2,200	18,135	Assessment and Refurbishment	No ^[4]	
6	A08360290	NAVER	Sutherland	60.4	15,370	33,505	Replacement	Yes	
7	A08360090	BONAR	Sutherland	58.9	1,450	34,955	Refurbishment	Yes ^[2]	
8	B80070070	GLENMORE	Lochaber	57.9	1,900	36,855	Replacement	Awaiting	
9	C11060010	BLACK BRIDGE KILMORACK	Inverness	57.7	15,000	51,855	Replacement (possibly by SSE)	Awaiting	
10	A088400XX	A884 BRIDGES	Lochaber	56.9	2,870	54,725	Replacement (Creiche, Cloiche, Easgadill)	Awaiting	
11	A08360260	BORGIE	Sutherland	54.1	770	55,495	Refurbishment	Awaiting	
12	C11080050	MAULD	Inverness	52.2	7,550	63,045	Replacement	Awaiting	
13	C11540030	DULSIE	Nairn and Cawdor	50.3	480	63,525	Refurbishment	Awaiting	
14	B91590010	WICK HARBOUR	Caithness	47.2	10,450	73,975	Replacement	Awaiting	
15	A08310100	COMAR	Inverness	46.6	850	74,825	Refurbishment	Awaiting	
16	A08940030	KYLESKU	Sutherland	44.8	2,450	77,275	Refurbishment	Awaiting	
17	A08840090	ACHNAGAVIN	Lochaber	44.6	920	78,195	Refurbishment	Awaiting	
18	A08320060	MOY	Ross and Cromarty	44.4	12,500	90,695	Replacement	Awaiting	
19	A08840080	ACHARN	Lochaber	43.2	1,200	91,895	Refurbishment	Awaiting	
20	A08380010	TIRRY	Sutherland	42.5	4,800	96,695	Replacement	Awaiting	

Appendix 2.1 Major bridge schemes priority list									
No	Bridge Code	Bridge Name	Area	Priority Score ^[1]	Est £k	Cum Total £k	Scope of Work	Funded?	
21	A08380020	FIAG	Sutherland	40.5	1,950	98,645	Replacement	Awaiting	
22	U46200010	WATERLOO	Inverness	38.5	2,650	101,295	Steelwork repairs and repaint	Awaiting	
23	U24000020	SLOCHD COTTAGES RAILWAY	Badenoch and Strathspey	35.9	1,000	102,295	Strengthening and refurbishment	No ^[4]	
24	U51640010	OLD WHITEBRIDGE	Nairn and Cawdor	32.6	250	102,545	Repointing	Yes ^[2]	

Notes

- [1] The priority score is out of 100 with higher scores being worse.
- [2] Scheme funded under the generic major bridges line of the five-year 2024/25 to 2028/29 capital programme.
- [3] Scheme is partly funded (initial feasibility and design only) under generic major bridges line of capital programme.
- [4] Scheme (in bold) not funded under capital programme. Proposed 'managed decline' and eventual closure.

Appendix 3 - Descriptions for selected major bridge schemes

Ness Bridge Remediation

Structure Name	Ness Bridge	Structure Number	B08610010
Location	B861 Young Street, Inverness	Priority Score	65.7
Area	Inverness	Priority Ranking	1
Description	77m long three-span post tensioned of	concrete bridge with h	alf-joints

Existing Risk

Ness Bridge is a high priority because it features post-tensioning and half-joints which are features at risk of hidden deterioration and sudden collapse. As such the bridge requires careful management. A special investigation and assessment in 2023 and 2024 revealed concerns with the half-joints which require addressing.

Potential Consequences

Half-joints, which are present on Ness Bridge carry a small risk of sudden failure. It is therefore critical to safety that appropriate



solutions are implemented to ensure the continued safe operation of the bridge. Work is ongoing to determine the solutions.

Proposed Scheme

As of 2025, work is underway to further investigate the bridge and develop a refurbishment scheme. It is expected that refurbishment will take place in 2026 and will include concrete repairs and re-waterproofing of the deck. There will be some disruption to traffic during the work.

Funded?

Yes. The estimated £1,850k cost is covered by the current five year capital programme, 2024/25 to 2028/29.





Photos: Ness Bridge (top), crack under the half-joint (bottom left), special investigation, 2023 (bottom right).

Strathcarron Bridge Repairs

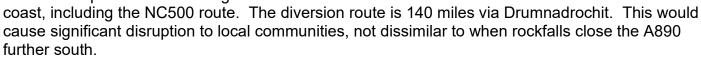
Structure Name	Strathcarron	Structure Number	A08900080
Location	A890, near Strathcarron Station	Priority Score	64.1
Area	Ross and Cromarty	Priority Ranking	2
Description	60m long 5 span concrete bridge		

Existing Risk

An assessment in 1987 concluded that the structure is substandard. There is significant cracking and spalling to the underside of the bridge deck, including to previously repaired concrete. High potential for requiring a weight restriction in the near future.

Potential Consequences

Closure or weight restriction would result in severe disruption to travel along the west





As of 2025, a feasibility study is underway to examine options for refurbishment and replacement, in conjunction with consideration of flood risk and improvements to the singletrack approach roads. Whilst the feasibility study is not yet finished, the early signs are that replacement will be preferred option, and the proposed cost below has been set to reflect that.

Funded?

Partly. There is sufficient funding in the current five-year programme for the initial feasibility study, and possibly detailed design, but not for the works. The plan is to progress the scheme up to completion of detailed design so that it is ready for construction when funding becomes available. The estimated £11,000k cost of replacement is not funded in the current five-year capital programme, 2024/25 to 2028/29.







Spey Bridge Cromdale Repairs and Repainting

Structure Name	Spey Bridge Cromdale	Structure Number	C11520020
Location	About 5km downstream from	Priority Score	60.6
	Grantown on Spey	-	
Area	Badenoch and Strathspey	Priority Ranking	5
Description	60m metre long, 2 span steel truss bridge		

Existing Risk

The bridge has severe corrosion to the underside of the deck and widespread breakdown of the paint system. The corrosion is so severe that there are holes in some elements. One abutment is badly damaged, and the bridge is currently propped at one end. A 7.5tonne weight restriction is in place.

Potential Consequences

It is likely that in the near future we will need

to further restrict or close the bridge. The bridge is on the Speyside Way; therefore any closure will impact tourism, and active travel as well as the local communities and businesses.

Proposed Scheme

A refurbishment is required. The work would entail carrying out a structural assessment to determine the extent of repairs and if the prop can be removed, repairing the south abutment, pier, steelwork, installing new bearings, blast cleaning and repainting the whole structure. However given the insufficient funding for major bridges, it is proposed for now not to progress a scheme and instead put the bridge into 'managed decline.'

Funded?

No. The estimated cost of refurbishment is £2,200k is not funded in the current five-year capital programme, 2024/25 to 2028/29.





Kinlochleven Viaduct Repairs

Structure Name	Kinlochleven Viaduct	Structure Number	B8630060	
Location	B863, Kinlochleven	Priority Score	61.2	
Area	Sutherland Priority Ranking 4			
Description	93m long, 10 span concrete viaduct. Grade A listed.			

Existing Risk

The concrete on both the columns and bridge deck is in a poor condition. There is widespread cracking and spalling, with exposed and corroding reinforcement bars. Some parts of the area under the bridge are cordoned off due to the risk of falling concrete.

Potential Consequences

Closure or weight restriction would result in disruption to the community of

Kinlochleven. The south shore road is the

main route in, although longer, narrower route exists on the north shore.

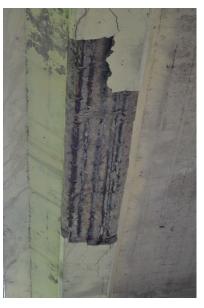


Proposed Scheme

Carry out structural assessment, concrete testing and feasibility study to examine options for the bridge. Assumed option at the moment is to carry out a full refurbishment of the bridge.

Funded?

Partly. Initial feasibility and design work is funded. The estimated works costs of £2,550k is not currently funded in the five-year capital programme, 2024/25 to 2028/29.





Bonar Bridge Repainting

Structure	Bonar Bridge	Structure	A08360090
Name		Number	
Location	A836, Bonar Bridge	Priority Score	58.9
Area	Sutherland	Priority	7
		Ranking	
Description	104m span, steel arch bridge		

Existing Risk

Bonar Bridge had a paint inspection carried out in 2016, which stated that the paint system had largely failed and should be replaced within 5 years. The form of the structure is prone to sudden collapse if not adequately maintained. The structure is not currently a high risk for closure or restriction; this scheme is required to prevent a much larger repair bill in the future.



Potential Consequences

Bonar Bridge has a high strategic function on the Sutherland road network. It is one of only two bridges connecting East Sutherland and Caithness to the south. The other (A9 Dornoch Bridge) can be closed due to high winds. The form of the structure is prone to sudden collapse if not adequately maintained. This is one of our largest bridges, and therefore the cost of replacement will be very high (est. £30million).

Proposed Scheme

Blast clean and repaint the entire structure. Minor repair works where required. Improve drainage around bearings. Remove redundant and unsafe access gantry.

Funded?

Yes. The estimated cost of £1,450k is funded in the five-year capital programme, 2024/25 to 2028/29.





A884 Creiche to Easgadil Bridges

Structure Names	Creiche, Cloiche and Easgadil Bridges	Structure Number	A08840020 to 40
Location	A884 Carnoch to Lochaline Road, Loch Sunart	Priority Score	Between 46.5 & 56.9
Area	Lochaber	Priority Ranking	10
Description	Three reinforced concrete bridges between 3.3m and 11.40m span		

Existing Risk

Three bridges on the A884 on the south shore of Loch Sunart with concrete deck defects including cracking and spalling. Two of the bridges, Creiche and Cloiche, failed assessment in 1992 but are not subject to weight restriction. This means the bridges are potentially carrying loads in excess of their capacity and are therefore operating with a reduced factor of safety. There have been recent increases in timber transport traffic on the road.

Potential Consequences

If the previous assessment result is correct, then the bridges are operating at a reduced factor of safety and there is increased risk of collapse.



Closure or weight restriction would cause disruption on the road to Lochaline.

Proposed Scheme

As a minimum, re-assessment is required. Re-assess Creiche and Cloiche bridges to determine whether replacement is required. Following re-assessment carry out a scheme to either repair the structures or replace them.

Funded?

No. The estimated cost of £2,870k to replace of all three bridges is not funded in the five-year capital programme, 2024/25 to 2028/29.





Borgie Bridge Repairs

Structure Name	Borgie	Structure Number	A08360260
Location	A836 between Bettyhill and Tongue	Priority Score	54.1
	(NC 500)	_	
Area	Sutherland	Priority Ranking	11
Description	42.5 m long, 5 span concrete structure, with masonry cladding.		

Existing Risk

The concrete bridge deck is in a poor condition with exposed and corroding reinforcement bars visible on the underside. Potential for continued deterioration leading to reduced capacity (and therefore weight restriction or closure).

Potential Consequences

Closure or weight restriction would result in severe disruption to travel along the north



coast, including the NC500 route. The diversion route is 60 miles via Kinbrace. The communities affected would include the north coast from Tongue to Durness (to the west) and the north coast from Melvich to Thurso and Wick (to the east).

Proposed Scheme

Concrete investigation and testing to determine extent of repairs. Works contract for concrete repairs and installation of cathodic protection (to prevent further corrosion of rebar).

Funded?

No. The estimated repair cost of £770k is not funded in the five-year capital programme, 2024/25 to 2028/29.





Glenmore Bridge Replacement

Structure Name	Glenmore	Structure Number	B80070070	
Location	B8007, 2 mi west of Glenborrodale	Priority Score	57.9	
Area	Lochaber Priority Ranking 8			
Description 9.5m long 2 span, reinforced concrete slabs				

Existing Risk

Glenmore bridge dates from circa 1950. common for bridges of this era, the reinforced concrete was constructed to lower standards than today and is now in poor condition. The bridge was assessed in 1996 as capable of carrying only 7.5 tonnes (full loading is 40 tonnes). No weight restriction was imposed on the bridge because it is a lifeline providing the route only Ardnamurchan and Kilchoan. As such the bridge is operating with a reduced factor of safety. increases the risk that the structure might need to be closed or restricted if further deterioration occurs.



Potential Consequences

Glenmore is a lifeline bridge with no alternative diversion route. A weight restriction would be disruptive, and a bridge closure would cut off access to Ardnamurchan peninsula, including Kilchoan.

Proposed Scheme

Replacement with a new single span structure to avoid the need for a pier in the river. The lack of alternative route increases the priority of this project. An offline diversion would be required to ensure the road remains open. Some initial survey and design work has been undertaken but detailed design and land negotiations are not done.

Funded?

No. The estimated cost of £1,900k is not funded in the five-year capital programme, 2024/25 to 2028/29.





Waterloo Bridge Repairs

Structure Name	Waterloo	Structure Number	U46200010
Location	U4620 Grant Street at River Ness	Priority Score	38.5
Area	Inverness	Priority Ranking	22
Description	109m long 5-span half-through truss, assumed to be steel		

Existing Risk

Waterloo Bridge was constructed circa 1896 and is presently in poor condition due to paintwork failure and subsequent corrosion of steelwork. The bridge is substandard and has a 7.5t weight limit (except for some buses). Whilst the bridge is old, it is considered to be repairable by repainting and steelwork repair methods such as replacement and over-plating of members. The bridge is thought to be steel but might comprise wrought iron. Further testing and investigation would be required



testing and investigation would be required to confirm the materials.

Potential Consequences

Lack of repainting will allow corrosion of the steel to continue which will ultimately lead to further weight restriction or closure. This would cause traffic disruption in central Inverness. The bridge is also important because it carries services over the River Ness.

Proposed Scheme

Carry out a major maintenance scheme to extend the life of the structure. The scheme would comprise scaffolding, temporary encapsulation (to prevent pollution from paint removal), repainting, resurfacing and steelwork repairs. No preparatory work has yet been carried out; this would be a new scheme. The temporary scaffolding and encapsulation would be a significant part of the cost.

Funded?

No. The estimated cost of £2,650k is not funded in the five-year capital programme, 2024/25 to 2028/29.



