Agenda Item	8
Report No	CIA/24/19

HIGHLAND COUNCIL

Date: 30 May 2019

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Report Title: Structures Progress Report 2018/19

Report By: Director of Community Services

Purpose/Executive Summary

1.1 This report provides an update on the work undertaken on the Area Structures Programme for 2018/19 financial year.

2 Recommendations

2.1 Members are asked to note the contents of the report.

3 Structures Assets

3.1 In Inverness area there are 243 bridges, 78 minor culverts and 150 retaining walls that are on adopted roads.

4 Finance

4.1 Structures maintenance and repairs are funded from Inverness Area Revenue Budget.

The 2018/19 structures budget was set at £68,100.

At the end of February 2019 £55,281, or 81%, of the budget has been spent with a further £5,000 funded from the emergency watercourse repairs budget in relation to flood damage at Carnock Bridge.

With a designated technician now dedicated to this task, works initiated will increase along with inspections and budget spend is envisaged to increase in 2019/20 and future years.

5 Bridge Inspection Programme

5.1 All bridges receive General and Principal Inspections. General Inspections are undertaken on a risk based inspection cycle of either two or three years as approved at the November 2018 EDI Committee. The risk based inspection intervals are dependent on condition, exposure and risk of deterioration as set out in the guidance issued by the Society of Chief Officers of Transportation in Scotland.

Principal Inspections are undertaken at 6, 9, or 12 year intervals.

An inspection programme for all other structures such as retaining walls is being prepared based on a three yearly cycle of inspections. This inspection programme will be implemented in phases from 2019/20.

5.2 Bridge General Inspections are undertaken by Area staff. Area staff and duties are as follows:-

Road Operations Manager based in Inverness:-

- Responsible for ensuring the General Inspections are undertaken
- Approving design work
- Award of contract for any works externally sourced
- Compliance with Quality Assurance procedures

Senior Engineer based in Inverness:-

- Approving design work
- Award of contract for any works externally sourced
- Compliance with Quality Assurance procedures

Bridge Technician based in Inverness (also covering Nairn, Badenoch & Strathspey):-

- Ensuring all General Inspections are undertaken in accordance with the programme
- Compiling a list of all works to be undertaken
- Designing and supervising minor repairs and maintenance works

The following staff assist the Bridge Technician as required:-

- Senior Technician based in Inverness
- Roads Inspector based in Inverness
- Roads Officers based in Inverness

5.3 2018/19 Bridge General Inspection Programme

The 2018/19 General Inspection Programme was started in April 2018 conducted during other duties by a Senior Technician. The Bridge Technician was appointed in January 2019. 56 bridges were identified for the 2018/19 General Inspection Programme.

At the end of March 2019 19 bridges had been inspected from the inspection list. This is a 36% inspection completion rate from the yearly inspection programme. A further 30 inspections have been completed from a backlog list of inspections that have been unable to be completed previously, giving an overall total of 49 inspections completed.

This is envisaged to increase to 100% in future years with the technician now in post. There will also be additional inspections carried out beyond the inspection programme to bring the backlog of inspections up to date.

The bridges inspected are listed in **Appendix A**.

5.4 2018/19 Principal Inspection Programme

Principal Bridge Inspections are undertaken on bridges with greater than 5m spans by the Development and Infrastructure Structures Team based in Alness.

At the end of March 2019 21 bridges had been inspected out of a total of 21 programmed.

The bridges inspected are listed in **Appendix B**.

5.5 2018/19 Bridge Maintenance Programme

The following repairs were undertaken in 2018/19:-

- Greig Street Bridge
 - Structural repairs and replacement of timber deck panels.
 - Replacement of elongated and stripped thread bolts at various locations on both sides.
- Infirmary Bridge
 - · Bottom chord splice plate replacement
 - New bolts installed
 - Tar and chip to deck plates
- Corrievorrie Bridge
 - Timber deck repairs
- Cantray Bridge
 - Barrie and pillar rebuild
 - Verge markers installed

- Glenmazeran Bridge
 - Timber deck repair
- Flichity, Balnagarline, Inverfarigaig Bridges
 - Stone parapet repairs
- Ardachy
 - Removal of verge build-up
 - Cleaning of drainage holes
- Black Bridge, Kilmorack
 - Clearance of deck
 - · Clearance of drainage system
 - General maintenance works
- Rose Bridge
 - Rebuilding of parapet
- Faillie Bridge
 - Removal of vegetation across structure
- Auchteraw
 - Repair of timber deck
- Carnoch
 - Concrete invert replacement
 - Abutment repairs
 - Downstream cascade rebuilt
- Dumnaglass Bridge
 - Rebuild of parapet
- Achtemarack Bridge
 - Timber deck repair and parapet repair
- Slochd Bridge
 - Parapet protection works
- Clachnaharry Sea Wall
 - · Concrete repair and re-pointing

5.6 2019/20 Bridge Maintenance Programme

Following the 2018/19 General & Principal Inspection Programmes a master list of all defects is currently being complied.

The master list will be used to identify works by similar type or by location to enable efficient repairs to be undertaken by the DLO. Each defect recorded is costed and prioritised to ensure effective works are undertaken. Outstanding or deferred works can also be tracked to ensure a comprehensive works programme for future years.

6. Implications

- 6.1 Resource No implications.
- 6.2 Legal Under the Roads (Scotland) Act 1984 there is a duty to inspect and maintain bridges and other structures associated with roads.
- 6.3 Community (Equality, Poverty and Rural) No implications.
- 6.4 Climate Change / Carbon Clever No implications.
- 6.5 Risk No implications.
- 6.6 Gaelic No implications.

Designation: Director of Community Services

Date: 7 May 2019

Author: John Taylor, Road Operations Manager (Inverness)

2018/19 Area Structures Progress Report Completed General Inspections

Structure Ref	Name	Status	Date	Comments
F00000010	GREIG STREET	Complete	02-Jul-18	
F00000020	INFIRMARY	Complete	01-Aug-18	
B90060020	MUCKOVIE	Complete	05-Aug-18	
B90060060	VIEWHILL	Complete	05-Aug-18	
B90390010	PETTY	Complete	05-Aug-18	
B90390030	CASTLE STUART	Complete	05-Aug-18	
B08520020	ALLT RUIGHE BHUIDHE	Complete	11-Aug-18	
B08520030	ALLT EAS A'CHIAT	Complete	11-Aug-18	
C11210010	FREEBURN	Complete	20-Sept-18	
C11210030	TOMATIN	Complete	20-Sept-18	
C11210040	CORRIEVORRIE	Complete	20-Sept-18	
U28480010	MOY	Complete	24-Sept-18	
A08330010	CULNAKIRK	Complete	27-Sept-18	
A08330020	DEARG	Complete	27-Sept-18	
A08330030	CONVINTH	Complete	27-Sept-18	
U44200010	MILLBURN	Complete	23-Oct-18	
U47030010	MILLBURN	Complete	08-Mar-18	
U31510010	ACHINDOWN	Complete	30-Jan-19	
C10880010	CLAVA	Complete	30-Jan-19	
U50430010	MILTON OF LEYS UNDERPASS	Complete	27-Feb-19	
U50430010C01	MILL BURN	Complete	27-Feb-19	
C10440011	LOCHARDIL BURN	Complete	27-Feb-19	
U14720000C09	DRUID BURN	Complete	27-Feb-19	
C10170011	MID COUL CULVERT	Complete	04-Mar-19	
U12330010	DALROY	Complete	04-Mar-19	
C1017020C64	AIRPORT RUNWAY DITCH	Complete	04-Mar-19	
U47030011	MILL BURN	Complete	08-Mar-19	
U41020010	ALLT NA SKIACH	Complete	08-Mar-19	
U11240010	SCRETON BURN	Complete	08-Mar-19	
B08610020C04	SLACKBUIE BURN	Complete	08-Mar-19	
C11180000C45	GENERAL BOOTH ROAD	Complete	13-Mar-19	
C11180000C22	GENERAL BOOTH ROAD	Complete	13-Mar-19	
U11440020	MILTONOF CULLODEN	Complete	13-Mar-19	

A08620060C76	UNNAMED (Lentran)	Complete	18-Mar-19
A08620030C33	UNNAMED (Bunchrew)	Complete	18-Mar-19
A08620040	KIRKTON	Complete	18-Mar-19
A08620110	BRIDGEND	Complete	20-Mar-19
B91540030	MEALLMORE	Complete	26-Mar-19
B91540020C19	UNNAMED	Complete	26-Mar-19
U28480010	MOY	Complete	26-Mar-19
B91540000C79	UNNAMED	Complete	26-Mar-19
U27280000C95	INVEREEN	Complete	26-Mar-19
C10800030	ALLT NA GOIRE 2	Complete	26-Mar-19
B08510030C23	BLARACHAR	Complete	26-Mar-19
B08510030C36	MILTON OF ABERARDER	Complete	26-Mar-19
U27860010C95	RUTHVEN FARM	Complete	26-Mar-19

2018/19 Area Structures Progress Report Completed Principal Inspections and General Inspections over 5m

Duides Oads	Duides News
Bridge Code	Bridge Name
A08620100	BEAULY STATION RAILWAY
B08510020	DUNMAGLASS
B08510040	BRIN SCHOOL
B08510060	INVERARNIE LODGE
B08510070	WHITEMILL
B08610010	NESS
B08620030	DOE
B08620040	WHITEBRIDGE
B08620050	CHAPEL
B08620060	TORNESS
B91640010	NEWTON BURN
C10760010	BRIN
C11080010	BRUIACH
U11040010	TORDARROCH
B91640011	FOOTBRIDGE AT NEWTON BURN
B91540010	MOY
C11210011	FREEBURN FOOTBRIDGE
C11120010R99	RETAINING WALL
U28230010	LOWER FOYERS BAILEY
B08610029	BALNAFOICH
A08310160	STRUY
U17500010	WHITE
U15470009	MUCHRACHD
U11770010	LOWER FOYERS
B08620010	TARFF
A08310110	CANNICH
F00000010	GREIG STREET
F00000020	INFIRMARY