

**THE HIGHLAND COUNCIL**  
**PLANNING, DEVELOPMENT AND INFRASTRUCTURE**

Agenda Item	10
Report No	PDI 31/15

**3 JUNE 2015**

**CAPITAL PROGRAMME ALLOCATION OF GENERIC LINES – ROADS, BRIDGES AND FLOODING**

**Report by Director of Development & Infrastructure**

**Summary**

This report makes recommendations for the allocation of generic line funding in relation to roads, bridges and flooding, forming part of the Development and Infrastructure element of the Council's Capital Programme. It seeks approval of the proposed allocations.

Members are also asked to note the list of major bridges for which there is no current allocation, and also the consultation exercise ongoing in relations to flooding issues.

**1. Background**

- 1.1 The Highland Council approved the Capital Programme report HC/6/15 for the financial years 2014/15 to 2023/24.
- 1.2 Within this capital programme report were named projects to be delivered, and generic lines where it was recognised that Committee approval would be sought to populate these lines.
- 1.3 Generic lines coming under the Development and Infrastructure Service include:
  - major road improvements;
  - minor road improvements;
  - major bridges;
  - lifeline bridges;
  - flood prevention schemes;
  - minor flood works; and
  - potentially vulnerable area flood mitigation.
- 1.4 It is recognised that the Capital Programme spans 10 financial years; this report proposes to allocate funding over the next three financial years, 2015/16 to 2017/18, to provide a working programme for delivery. A further report will be brought, in due course, to seek approval for future years' allocation.

## 2. Major Road Improvements and Minor Road Improvements

### 2.1 Major Road Improvements

The approved Capital Programme includes the following allocation for Major Road Improvements for the next three years, and for the 10 year period 2014-2024:

OBC Ref.	Project Name	2015/16	2016/17	2017/18	Total for 2014/15 - 2023/24
		£000	£000	£000	£000
TECS 34 TECS/2013/26	Major Road Improvements	0	856	812	29,293

2.1.2 The 2012 Capital Programme included three priority “Lifeline Roads” projects for construction using European Regional Development Fund (ERDF) assistance:

- A861 Drynie Hill – Ardnamurchan;
- A838 Laxford Bridge North Approach; and
- A890 Strathcarron – Balnacra

The first two of these projects, and the first 2km of the A890 Strathcarron to Balnacra project, have been completed.

A further priority improvement on the A99, between Keiss and North Keiss, north of Wick, is currently under construction.

2.1.3 A strategic review of the road network has been undertaken, and the two remaining single track sections of the A890, between Strathcarron and Lair, have been identified as being at the highest priority level for improvement; 2km has already been upgraded, as described in 2.1.2 above. The remaining sections are therefore included in the proposed list of projects for funding in the period 2015/16 to 2018/19:

- Strathcarron – Balnacra phase 2 (including new bridge at Culags); and
- Balnacra – Lair.

2.1.4 The critical section of the A890 road further south, at Stromeferry Bypass, is already identified as a standalone project within the Capital Programme.

2.1.5 The other high priority roads identified in the road network strategic review are:

- A832 Slattadale to Kerryside (to complete twin tracking of the Achnasheen to Gairloch road);
- A890 Kishorn-Lochcarron-Strathcarron;

- A836 Thurso – Tongue (3 sections of single track road at Bettyhill-Farr, Naver Bridge to B871 junction, and Braetongue – Rhitongue);
- B810 Rhiconich – Kinlochbervie; and
- A884 Carnoch-Lochaline.

2.1.6 Schemes from the review that require significant bridge or other structural works will be considered in future reviews, taking cognisance of the Bridges generic lines.

2.1.7 Schemes on routes which are already twin-track, but with narrow sections, will be considered at future capital allocation reviews. Such sections include:

- A832 Avoch – Fortrose; (narrow section of road east of Avoch);
- A862 Dingwall - Ardullie (narrow verges, single track at railway bridge);
- A938 Carrbridge to Dulnain Bridge; and
- A939 Grantown on Spey - Nairn.

2.1.8 The funding for major road improvements for the period 2015/16 to 2017/18 is £1.668m, with a total allocation of £29.293m over the life of the capital programme to 2023/24. It is proposed to progress the development of design, obtain construction consents, and land acquisition for the three highest priority schemes, for the next three years, but to allocate some funding to preliminary work on other projects for options appraisals, geotechnical and environmental site studies, in recognition of the long durations from preliminary design through to the commencement of construction. The funding allocation within this period will not permit meaningful construction works, but a future paper will recommend allocation for major construction works from 2019/20, from the capital allocation.

2.1.9 The proposed allocation of the major road improvements budget for the next three years is:

<b>Project Name</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>
	<b>£000</b>	<b>£000</b>	<b>£000</b>
<b>A890 Strathcarron to Balnacra</b>	-	190	140
<b>A890 Balnacra to Lair</b>	-	380	342
<b>A832 Slattadale to Kerryside</b>	-	286	250
<b>A890 Kishorn-Lohcarron-Strathcarron</b>	-		20
<b>A836 Thurso – Tongue</b>	-		20
<b>B810 Rhiconich - Kinlochbervie</b>	-		20
<b>A884 Carnoch-Lochaline</b>	-		20
<b>Total - Major Road Improvements</b>		856	812

## 2.2 Minor Road Improvements

2.2.1 The approved Capital Programme includes the following allocation for minor road improvements for the next three years, and for the 10 year period 2014-2024:

OBC Ref.	Project Name	2015/16	2016/17	2017/18	Total for 2014/15 - 2023/24
		£000	£000	£000	£000
TECS 34 TECS/2013/28	Minor Roads	970	1,095	1,095	9,135

2.2.2 TECS Committee in 2011 allocated funding for minor roads, report TEC-80-11, and included four priority 'minor roads' projects:

- A99 Keiss – North Keiss
- B851/B862 South Loch Ness
- A832 Slattadale
- B9090 Clephanton Bends, Cawdor

The first two projects are currently under construction. The A832 Slattadale project is out to tender, and is a 1km section of twin-tracking leading to the larger Slattadale to Kerryside project described in section 2.1. The B9090 Clephanton Bends project is at detailed design stage.

2.2.3 The £450k of Council funding invested in South Loch Ness over the past three years has levered in a further c£8m in Strategic Timber Transport and wind farm developer funding. A recent review of opportunities to benefit from wind farm developer funding for road mitigation works has concluded that some Council funding for design, land acquisition and minor accommodation works (primarily fencing) will facilitate enhanced provision and better unitisation of developer contributions.

It is therefore proposed that an allocation of funding be made to prepare for such future schemes, on an on-demand basis.

2.2.4 Two further high priority minor roads schemes that can be progressed in the three year period, and are key to economic development in their areas, have been identified:

- Killimster Moss road, Caithness – repair of 1km of road over deep peat is required to better cater for HGV traffic serving a number of industrial operations in the area; and
- Portree Link Road – completion of the link, to release constraints on adjacent development land.

2.2.5 The proposed allocation of the Minor Road Improvements budget for the next three years is:

Project Name	2015/16	2016/17	2017/18
	£000	£000	£000
A99 Keiss to North of Keiss Widening	200		
B851/B862 South Loch Ness Road Improvements	300	150	150
A832 Slattadale Widening	400	50	
B9091 Clephanton Bends Improvement	40	610	25
Killimster	10	165	350
Portree Link		50	500
Design and land acquisition for developer-funded schemes			
Caithness & Sutherland	10	20	20
Inverness	10	20	20
Lochaber		10	10
Nairn, Badenoch & Strathspey		10	10
Skye, Ross & Cromarty		10	10
<b>Total - Minor Roads</b>	<b>970</b>	<b>1,095</b>	<b>1,095</b>

### 3 Major Bridges and Lifeline Bridges

#### 3.1 Scheme Preparation

3.1.1 Early identification of schemes is important to allow the completion of design, land agreements, consultations, and statutory approvals, in time to deliver the schemes in line with the approved Capital Programme.

3.1.2 The lead-in time for major bridges can be very significant, and this has been recognised in these proposals.

#### 3.2 Prioritisation of Schemes

3.2.1 The Council is responsible for over 1,400 bridges, 700 culverts, and some 800 retaining walls, on its road network.

3.2.2 By virtue of their age, condition, or limited load-carrying capacity, many of these structures are sub-standard, to the extent that they can significantly impair the functioning of the road network. There are, therefore, many candidate schemes to be considered. Potential schemes could involve repair, strengthening, or full replacement of a structure.

3.2.3 To assess priorities for investment in road structures, with a view to ensuring the most effective use of the limited available funding, it is necessary to

consider safety, economic benefit, value for money, social needs, and access to communities, as all may be affected by investment in dealing with a sub-standard structure.

### 3.3 Major Bridges

3.3.1 The approved Capital Programme includes the following allocation for major bridges for the next three years and for the 10 year period 2014-2024:

OBC Ref.	Project Name	2015/16	2016/17	2017/18	Total for 2014/15 - 2023/24
		£000	£000	£000	£000
TECS 57	Major Bridges	0	0	0	9,000

As can be seen from the allocation there is no generic funding allocation for this line, from 2015/16 to 2017/18, and thus no allocation may be recommended. A862 Muir of Ord Railway Bridge, and B970 Ruthven (Spey) Bridge will go ahead in these years, having been specifically identified in allocations. A contract has been awarded for Ruthven (Spey) Bridge, and Muir of Ord Railway Bridge Replacement is out to tender.

3.3.2 Proposals for Capital expenditure on Major Bridges are given in **Appendix A** to this report.

3.3.3 Members will note that the construction phase for a number of schemes starts beyond 2017/18. Given the significant lead-in time for these schemes it is important to commit funds to early design and scheme preparation work. It is proposed that design development, construction consents and land acquisition for the major bridges identified in **Appendix A** be progressed, as funding becomes available.

### 3.4 Lifeline Bridges

3.4.1 The approved Capital Programme includes the following allocation for Lifeline Bridges for the next three years and for the 10 year period 2014-2024:

OBC Ref.	Project Name	2015/16	2016/17	2017/18	Total for 2014/15 - 2023/24
		£000	£000	£000	£000
TECS 29 TECS/2013/10	Lifeline Bridges	500	1,000	1,000	8,500

3.4.2 Proposals for Capital expenditure on Lifeline Bridges are given in **Appendix B** to this report.

3.4.3 The proposed allocation of the Lifeline Bridges budget for the next three years is:

Project Name	2015/16	2016/17	2017/18
	£000	£000	£000
U1074 Ruthven (Abersky)	135		
B8007 Glenmore	100	425	10
A837 Inveran	250		
A896 Chada	15	200	335
A838 Flag		25	150
A831 Comar		350	
C1094 Glen Etive (5 no. bridges)			10
A855 Leasgary			35
A861 Lochailort			400
B849 Structures (15 no.)			10
A884 Bridges (Creiche & Easgadill)			10
A884 Bridges (Cloiche, Acharn & Ach'gavin)			10
B9178 Dulnain			10
A836 Borgie			10
A894 Kylesku			10
<b>Total – Lifeline Bridges</b>	<b>500</b>	<b>1,000</b>	<b>1,000</b>

3.4.4 Members will note that the construction phase for a number of schemes starts beyond 2017/18. Given the significant lead-in time for these schemes it is important to commit funds to early design and scheme preparation work. It is proposed that design development, construction consents and land acquisition for the bridges identified in **Appendix B** be progressed as funding becomes available.

#### 4 Flood Prevention Schemes, Minor Flood Works and Potentially Vulnerable Area Flood Mitigation

4.1 The approved Capital Programme includes the following allocation for flood prevention schemes, minor flood works, and potentially vulnerable area flood mitigation for the next three years and for the 10 year period 2014-2024:

OBC Ref.	Project Name	2015/16	2016/17	2017/18	Total for 2014/15 - 2023/24
		£000	£000	£000	£000
TECS 54					
TECS/201325	Flood Prevention Schemes	1,100	2,000	2,000	31,475
TECS/2013/27	Minor Flood Works		200	200	1,600
TECS/2013/16	Potentially Vulnerable Area : Flood Mitigation		1,000	1,000	7,500

These capital generic lines each serve a different purpose. This report recommends how these funding streams will be allocated.

4.2 In accordance with the requirements of the Flood Risk Management (Scotland) Act 2009, throughout this year SEPA have been developing the Flood Risk Management Strategy for the Highland & Argyll, and Findhorn Nairn and Speyside Local Plan Districts in close consultation with the Council. This process has focused on a transparent, risk based, plan-led assessment of flood risk in the Highlands.

These plans specifically focus on the established Potentially Vulnerable Areas (PVAs), i.e. those areas identified as presenting significant flood risk.

Following a detailed review and appraisal of the existing (ongoing) measures and potential measures within PVAs, the following recommendations were agreed with SEPA:

	Flood Protection Works (FPW)	Flood Protection Studies (FPS)	Natural Flood Management Works (NFMW)	Natural Flood Management Studies (NFMS)	Improved Understanding (IU)	Surface Water Management Plans (incl. Integrated Catchment Studies)
Highland & Argyll LPD	3	20	0	7	3	7
Findhorn Nairn & Speyside LPD	-	4	0	2	1	1
TOTAL	3	24	0	9	4	8

4.3 'Flood Protection Works' (FPWs) are schemes which are sufficiently developed (with detailed design commenced, Flood Protection Orders in place, or pending and positive benefit – cost ratios in place) to ensure that delivery within the first 6 year cycle is expected. Schemes confirmed as FPWs will go into a national prioritised list and are expected to be eligible for funding from Scottish Government. The schemes the Council has confirmed with SEPA as FPWs are Caol, River Enrick in Drumnadrochit, and Smithton/Culloden. It should be noted that Scottish Government funding criteria has not yet been set, however it is expected that this would apply to schemes with a capital value greater than £2m. For schemes with a capital value below this, or schemes outwith a PVA, the Council's capital programme may be utilised following committee approval, in future years to enable progression to construction. Any grant allocation will be in addition to the Council's capital allocation indicated in this report.

4.4 'Flood Protection Studies' (FPSs) are schemes which require further



development. These range from 'new' schemes (not previously on the Council's Capital Programme therefore no work has taken place to date), to existing Capital Schemes which require further development and consideration of the options/ design before confirming as FPWs. The aim of a FPS will be to develop a scheme sufficiently such that should a funding gap become available, the scheme can be promoted to FPWs and progress to construction. The schemes the Council has confirmed with SEPA as FPSs are 'Tarbet Ness' including Rockfield, Balintore, Portmahomack, Inver, Skinnerton (coastal), River Gynack in Kingussie (fluvial), River Nairn Central (fluvial/ coastal), Golspie (coastal), Auldearn Burn in Nairn (fluvial), Upper River Ness (fluvial), Fort William (fluvial/ coastal), River Peffery in Dingwall and Blairninich (fluvial/ coastal), River Spey in Aviemore (fluvial), Kinlochewe (fluvial), Lochinver (fluvial), Garve (fluvial), Glencoe (coastal), Mill Burn in Inverness (fluvial), Newmill (fluvial), Contullich Burn in Alness (fluvial), Burnside Burn in Thurso (fluvial), Alton Burn in Nairn (fluvial), Dornoch Burn in Dornoch (fluvial), South Kessock in Inverness (coastal), Muir of Ord (fluvial), Ballachulish (fluvial), River Thurso (coastal and fluvial), Aviemore Burn in Aviemore (fluvial).

Note coastal being from the sea, and fluvial from rivers.

- 4.5 'Natural Flood Management Works' (NFMWs) are schemes similar to FPWs (fully designed and ready for funding) but with a focus on 'Natural' Flood Management Measures rather than hard engineering solutions. The Council has no NFMWs to progress this cycle.
- 4.6 'Natural Flood Management Studies' (NFMSSs) are similar to FPSs, but with a focus on 'Natural' Flood Management Measures. As with FPSs, NFMSSs are proposed in areas where an initial assessment for the potential for Natural Flood Management has confirmed that measures may help reduce flood risk. The schemes the Council has confirmed with SEPA as NFMSSs are Golspie (coastal), Contullich Burn in Alness (fluvial), Kinlochewe (fluvial), Dingwall (fluvial), Blairninich (fluvial), Drumnadrochit (fluvial), Ballachullish (fluvial), Auldearn Burn in Nairn (fluvial), Kingussie (fluvial).
- 4.7 'Improved Understanding' is recommended for the following areas where the SEPA model predictions of the flood risk are considered to be misrepresenting the flood risk, and further modelling is required. These areas include Wick (coastal), River Wick (fluvial), River Alness (fluvial), Dalwhinnie (fluvial). These studies areas will be re-modelled by SEPA over the coming cycle.
- 4.8 'Surface Water Management Plans/ Integrated Catchment Studies' are studies (previously agreed with SEPA and approved by the Planning, Development and Infrastructure Committee on 20/08/14 report PDI/32/14).

These include Inverness (where an Integrated Catchment Study has been commissioned in partnership with Scottish Water), Smithton/Culloden (as above), Dingwall and Strathpeffer, Fort William, Corpach, Newtonmore and Halkirk.

## 5. Proposals for Capital Allocation

5.1 In accordance with the Flood Risk Management Act timetable it is a requirement that, by June 2016, the Council will have approved and adopted the Local Flood Risk Management Plan for the Highland & Argyll, and Findhorn, Nairn and Speyside Local Plan Districts. These plans will set out a commitment and timetable for the delivery of the above recommendations.

It is recognised that not all the proposed actions can be funded and delivered within the first cycle.

The recommendation is that 12 out of 24 Flood Protection Studies will be progressed in the first cycle, and 12 in the subsequent cycle.

The prioritised Capital Programme is as follows:

Scheme	FPW Rank	FPS Rank	Cycle 1 (2016-2022)	Cycle 2 (2022-2028)
Caol FPW	1		X	
River Gynack FPS/ NFMS		1	X	
River Peffery FPS/ NFMS (in Dingwall & Blairninch)		2	X	
Tarbet Ness FPS		3	X	
River Nairn FPS		4	X	
Smithton/ Culloden FPW	2		X	
Auldearn Burn FPS/ NFMS		5	X	
Golspie FPS/ NFMS		6	X	
Mill Burn FPS		7	X	
River Enrick (in Drumnadrochit) FPW/ NFMS	3		X	
Upper River Ness FPS		8	X	
Fort William FPS		9	X	
Feabuie Culvert Replacement*			X	
Dell Burn #			X	
Kirkhill Watercourse Diversion*			X	
River Spey (in Aviemore) FPS		10	X	
River Thurso FPS		11	X	
South Kessock FPS		12	X	
Kinlochewe FPS/ NFMS		13		X
Garve FPS		14		X
Lochinver FPS		15		X

Balmacaan*			X	
Wick (Mill Lade) Improved Understanding				X
Wick Coastal Improved Understanding				X
River Alness Improved Understanding				X
Glencoe FPS		16		X
Ballachullish FPS/ NFMS		17		X
Contullich Burn (Alness) FPS/ NFMS		18		X
Dalwhinnie Improved Understanding				X
Burnside Burn (Thurso) FPS		19		X
Dornoch Burn FPS		20		X
Aviemore Burn FPS		21		X
Alton Burn (Nairn) FPS		22		X
Newmill (Nairn) FPS		23		X
Muir of Ord FPS		24		X

\*schemes not in PVAs already being progressed.

A study into options for the Dell Burn scheme will be progressed/ funded through the Inverness SWMP.

## 5.2 Flood Prevention Schemes

It is proposed that this budget will be allocated across a number of existing and proposed flood schemes.

The proposed distribution of these funds in the first three financial years of the programme is in **Appendix C**. This distribution focuses efforts to the highest priority schemes. There will be a mid-cycle review (2018/19) of the capital allocation for the second half of the first cycle, when the remaining schemes will be allocated budgets. A further report on this mid-cycle review will be submitted to this Committee in due course.

## 5.3 Minor Flood Works

It is proposed that this budget be allocated to minor capital flood alleviation works. Going forward, this budget will be used to implement 'miscellaneous' minor improvements to watercourses (such as screen replacements/ upgrades) to alleviate flood risk, as identified through watercourse inspections. It should be recognised that flooding issues do arise in areas not identified as a PVA. This budget will be made available to fund schemes required in non PVAs. This budget replaces the Flood Alleviation Budget, previously centrally held by Community Services.

The proposed distribution of these funds for the first three financial years is in **Appendix C**. It should be noted that there will be a mid-cycle review of the capital allocation for the second half of the first cycle, and a further report will be submitted to this Committee in due course.

#### 5.4 Potentially Vulnerable Area: Flood Mitigation

It is proposed to allocate this budget to the development of surface water management plans which require the investigation of significant surface water issues in seven locations resulting in capital schemes. Inverness' Integrated Catchment Study (ICS), Smithton/Culloden, and Newtonmore will take priority of the funding in the first three years.

The proposed distribution of these funds for the first three financial years is in **Appendix C**. It should be noted that there will be a mid-cycle review of the capital allocation for the second half of the first cycle, and a further report will be submitted to this Committee in due course.

#### 5.5 Public Consultation

Members should note that the formal consultation on the draft characterisation reports, objectives, and short list of measures, concludes in June 2015. This consultation will aid in the understanding of the issues, and inform and influence the development of solutions. A report on the responses received from the consultation will be submitted to a future Committee.

### **6. Implications**

#### 6.1 Financial

Financial implications are as detailed within the report and appendices.

#### 6.2 Equality

Any implications on equality issues will be considered as part of the detailed design process.

#### 6.3 Legal

There are no specific legal implications to highlight in this report, but any necessary flood schemes will be developed in accordance with the requirements of the Flood Risk management (Scotland) Act.

#### 6.4 Economic

The proposed capital works investment is expected to result in significant economic impacts including creation or retention of jobs associated with the delivery and the impacts on the wider economy of such infrastructure investment.

#### 6.5 Rural

The infrastructure investment proposed largely covers the more rural elements of the Highland area aiding the local rural economy and communities.

#### 6.6 Climate change

Climate change and increase in flows will be taken into consideration on all infrastructure projects and specifically flood alleviation schemes.

6.7 Risk

Risk is managed through construction via risk register identification and associated risk management.

6.8 Gaelic

There are no Gaelic implications over and above any signage that will be in accordance with Council policy.

**Recommendation**

Members are invited to:

- approve the proposed allocation of the major road improvements budget for the next three years;
- approve the proposed allocation of the minor road improvements budget for the next three years;
- approve the proposals for capital expenditure, on bridges and road structures schemes;
- approve the proposed allocation of the flood prevention schemes, minor flood works, and potentially vulnerable area mitigation budgets for the next three years; and
- note the major bridges needs which cannot be met from current funding allocations up to 2023/24.

Designation: Director of Development and Infrastructure

Date: 15/05/15

Author: Colin Howell

Background Papers: TEC-80-11, HC/6/15, PDI/32/14

## **APPENDIX A**

### **MAJOR BRIDGES SCHEMES 2015/16 to 2017/18**

<b>MAJOR BRIDGES</b>			
WARD	SCHEME	ESTIMATED COST (£000)	CONSTRUCTION START YEAR
9	A862 Muir of Ord Railway Bridge	5,500	2015/16
21	B970 Ruthven (Spey) Bridge	1,000	2015/16

### **MAJOR BRIDGES SCHEMES – Future Years to 2023/24**

<b>MAJOR BRIDGES</b>			
WARD	SCHEME	ESTIMATED COST (£000)	CONSTRUCTION START YEAR
22	B863 Invercoe Bridge	2,260	Future Years
1	A836 Naver Bridge	4,000	Future Years
6	A832 Grudie Bridge (Loch Maree)	1,250	Future Years

### **MAJOR BRIDGES SCHEMES – Future Years beyond 2023/24 – for information**

<b>MAJOR BRIDGES</b>			
WARD	SCHEME	ESTIMATED COST (£000)	CONSTRUCTION START YEAR
15	B861 Ness Bridge - Refurbishment	1,300	Future Years
3	B9159 Wick Harbour Bridge	2,100	Future Years
13	U2823 Lower Foyers Bridge	1,250	Future Years
6	A832 Moy Bridge, Contin	4,000	Future Years
22	B863 Kinlochleven Viaduct	2,000	Future Years
18	B9090 White Bridge	2,250	Future Years
1	A838 Tirry Bridge	1,400	Future Years
13	A831 Cannich Bridge	1,250	Future Years
21	U2400 Slochd Cottages Rail Bridge	1,000	Future Years
13	C1106 Black Bridge (Kilmorack)	to be confirmed	Future Years
21	C1152 Spey Bridge (Cromdale)	to be confirmed	Future Years
19	U3481 Nairn Harbour Bridge	to be confirmed	Future Years
1	A836 Bonar Bridge - Repainting	to be confirmed	Future Years

## **APPENDIX B**

### **LIFELINE BRIDGES SCHEMES 2015/16 to 2017/18**

<b>LIFELINE BRIDGES 2015/16</b>			
WARD	SCHEME	ESTIMATED COST (£000)	CONSTRUCTION START YEAR
20	U1074 Ruthven (Abersky)	135	2015/16
22	B8007 Glenmore	535	2015/16
5	A837 Inveran Refurbishment	250	2015/16

<b>LIFELINE BRIDGES 2016/17</b>			
WARD	SCHEME	ESTIMATED COST (£000)	CONSTRUCTION START YEAR
13	A831 Comar Refurbishment	350	2016/17
6	A896 Chada	550	2016/17

<b>LIFELINE BRIDGES 2017/18</b>			
WARD	SCHEME	ESTIMATED COST (£000)	CONSTRUCTION START YEAR
1	A838 Fiag Refurbishment	175	2017/18
22	A861 Lochailort	400	2017/18

### **LIFELINE BRIDGES SCHEMES – Future Years to 2023/24**

<b>LIFELINE BRIDGES – Future Years to 2023/24</b>			
WARD	SCHEME	ESTIMATED COST (£000)	CONSTRUCTION START YEAR
22	B849 Structures – 15 no.	600	Future Years
22	C1094 Glen Etive Bridges - 5 no.	1000	Future Years
22	A884 Cloiche & Acharn	150	Future Years
21	B9178 Dulnain Refurbishment	175	Future Years
1	A836 Borgie Refurbishment	450	Future Years
11	A855 Leasgary Refurbishment	400	Future Years
22	A884 Easgadill & Creiche	700	Future Years
11	B8009 Carbost Burn	500	Future Years
1	A894 Kylesku – refurbishment	375	Future Years
1	A894 Kylesku – parapet replacement	275	Future Years

## Appendix C

Project Name	2015/2016			2016/2017			2017/2018		
	PVA Mitigation	Major Flood Schemes	Minor Flood Schemes	PVA Mitigation	Major Flood Schemes	Minor Flood Schemes	PVA Mitigation	Major Flood Schemes	Minor Flood Schemes
	£000	£000	£000	£000	£000	£000	£000	£000	£000
Caol FPW		£147			£200			£50	
River Gynack FPS/ NFMS		£22			£526			£211	
River Peffery FPS/ NFMS		£112			£77			£345	
Tarbet Ness FPS		£0			£50			£88	
River Nairn FPS		£0			£45			£111	
Smithton/ Culloden FPW		£566			£194			£348	
Auldearn Burn FPS/ NFMS		£22			£60			£453	
Golspie FPS/ NFMS		£0			£50			£160	
Mill Burn FPS		£96			£109			£100	
River Enrick FPS/ NFMS		£89			£118			£125	
Upper River Ness FPS		£0			£10			£9	
Fort William FPS		£0			£0			£0	
Feabuie Culvert Replacement		£39			£538			£0	
Dell Burn #		£0			£0			£0	
Kirkhill Watercourse Diversion		0			£0	£200		£0	
River Spey FPS		£0			£0			£0	
River Thurso FPS		£0			£0			£0	
South Kessoek FPS		£0			£0			£0	
Balmacaan		£7			£23			£0	
Inverness SWMP / ICS				£231			£80		
Dingwall SWMP				£60			£0		
Fort William SWMP				£60			£0		
Corpach SWMP				£30			£0		
Smithton/ Culloden SWMP				£60			£220		
Newtonmore SWMP				£559			£700		
Halkirk SWMP				£0			£0		
Misc. Screen/ Watercourse Improvements									£200
<b>TOTAL</b>	<b>£0</b>	<b>£1,100</b>	<b>£0</b>	<b>£1,000</b>	<b>£2,000</b>	<b>£200</b>	<b>£1,000</b>	<b>£2,000</b>	<b>£200</b>