Agenda Item	6
Report No	ECI/15/2021

HIGHLAND COUNCIL

Committee:	Economy and Infrastructure
Date:	5 May 2021
Report Title:	Strategic Road Schemes – Capital Allocation
Report By:	Executive Chief Officer Infrastructure and Environment

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Purpose/Executive Summary

1.1 This report details the prioritised list of schemes for inclusion as part of the strategic £7.4M allocation of the £20M capital budget during years 2021/22 and 2022/23. The investment in the road network is welcome and reduces the exposure to risk for the Council and travelling public.

2

Recommendations

- 2.1 Members are asked to:-
 - Agree the proposed distribution of the budget, including the inclusion of new build schemes, as part of the previously agreed strategic £7.4M capital allocation over the financial years 2021/22 – 2022/23;
 - Note that Engineers may require to amend the road surface treatment programme, as part of their delegated powers, according to road condition (including the Scottish Road Maintenance Condition Survey), safety aspects and working efficiency as more information becomes available over the two financial years;
 - iii. Note that any underspend will be allocated by Engineers with a focus on providing more carriageway surface treatments, footway works, minor repairs on structures, vehicle restraint systems (safety barrier), signs, cattle grids and drainage and
 - iv. Note the 2021/22 distribution of the Roads Revenue and Capital Budgets in Appendix A.

3 Implications

3.1 **Resource** - as detailed in this report. The additional capital funding supports the key priority of the Council to 'maintain the current funding for our local road network and continue to make the case for additional resources in recognition of the unique challenges and costs of maintaining the largest road network in the UK'.

The road carriageway backlog and steady state figures for Highland are derived by SCOTS utilising the Scottish Road Maintenance Condition Survey (SRMCS). The backlog figure is the amount required to address the red and amber sections of carriageway in one year. The steady state is the amount required annually to maintain the network in its current condition, i.e. no deterioration or improvement. The last backlog figures for Highland were calculated in 2019 and are shown below:-

- Overall backlog: £194 million
- Steady State: £25.09 million
- 3.2 **Legal** The Council, as Roads Authority, has a duty under the Roads (Scotland) Act 1984 to maintain the adopted road network.
- 3.3 **Community (Equality, Poverty and Rural)** There is a risk that if road conditions deteriorate, access to low trafficked roads in rural areas and urban streets may become more restrictive as precedence is given to maintaining the strategic road network. However, the majority of the Strategic H1 network is rural and provides vital links between communities and transport hubs.
- 3.4 **Climate Change / Carbon Clever** There are no known implications arising as a direct result of this report. Although improving road conditions is unlikely to have a significant effect on carbon emissions, keeping the road surface in a condition which allows the free flow of traffic will assist in reducing them.
- 3.5 **Risk** managed under the Roads (Scotland) Act 1984. Corporate Risk 10 (CR10) Condition of Our Roads, in the Corporate Risk Register, highlights the importance of managing the condition of the network and supports investment.
- 3.6 **Gaelic -** No implications.

4 Background

4.1 The Roads and Transport budgets for 2021/22 are shown in **Table A** below (excluding the additional £10M capital for the year). The revenue budget is required to cover the winter service, cyclic maintenance (gully emptying, drainage, pothole repairs, minor patching, etc), structures maintenance (bridges, walls, culverts and cattle grids) and other assets such as signs and road markings. The total revenue budget below includes the additional £1M revenue agreed at Highland Council committee on 5 March 2020 (HC/2/20). A further breakdown of the budget is shown in **Appendix A**.

Budget	2021/22
Revenue	£14.3M
Capital (original allocation)	£7.2M
Total	£21.5M

Table A: Roads and Transport 2021/22 Budget

4.2 With a road network length of 6,766 km which has a corresponding gross replacement cost of over £6.4 billion, The Highland Council agreed to invest an additional £20M of capital funding for road maintenance. The Economy and Infrastructure Committee agreed on 4th February 2021 (ECI/6/21), that the funding would be split as shown in **Table B** below:-

Description	2021/22	2022/23	Totals
Strategic Assets and Structural Maintenance	£3.7M	£3.7M	£7.4M
Area Structural Maintenance	£3.6M	£3.6M	£7.2M
Ward Allocation (£100k per ward)	£2.1M	£2.1M	£4.2M
Fleet (specialised vehicles/plant)	£0.5M	£0.5M	£1M
Active Travel	£0.1M	£0.1M	£0.2M
Totals	£10M	£10M	£20M

Table B: £20M Capital Allocation

- 4.3 Members are reminded that capital road maintenance monies must be spent on activities that "add value to or improve the existing asset". Maintenance activities which come under this definition include tasks such as resurfacing of the road, surface dressing, road markings, vehicle restraint systems (safety fencing) renewal, footway improvements, sign replacements, repairs on structures and cattle grid renewals.
- 4.4 With regard to the additional capital resources for Area Structural Maintenance and the Ward Allocation, proposals for roads schemes have been presented for approval to Ward Business Meetings and Area Committees as follows:-

Area	Ward Business	Area
	Meeting	Committee
Caithness	12/04/21	22/04/21
Sutherland		01/03/21
Easter Ross Area	03/02/21	07/04/21 &
		25/05/21
Black Isle Dingwall & Seaforth	25/03/21	26 /04/21
Wester Ross, Lochalsh, Strathpeffer	15/03/21	26/04/21
Inverness City and Area (7 Wards)	March/ April	27/05/21
Isle of Skye & Raasay	22/03/21	29/03/21
Nairn	05/03/21	10/03/21
Badenoch & Strathspey	07/05/21	25/05/21
Lochaber	08/02/21	19/04/21

Table C: WBM and Area Committee Dates

- 4.5 The priorities for roads schemes for the Area Maintenance programmes have been based on the outcomes of the Structural Road Maintenance Condition Survey, supplemented by local road inspections and local knowledge. The priorities for the Ward Allocation Schemes have been determined by Members.
- 4.6 With regard to the additional capital resources for strategic road schemes, it has been agreed that the strategic schemes would be assessed utilising the condition information that was available, along with local knowledge and Engineering judgement. The schemes generated are to address parts of the strategic network that Area offices would not normally have the funding to repair.

4.7 In 2009, the Council approved the Road Network Hierarchy and Inspections Policy for Highland. A copy of the Road Network Hierarchy descriptions are shown in Appendix B. Members are reminded that the Strategic Network is considered to be in addition to the Trunk Road network, to link main harbours or travel centres such as Inverness Airport. Using the hierarchy indirectly supports tourism and industries such as fishing by investing in the network links they require.

5 £7.4M Capital Allocation Profile for Strategic Roads Schemes

- 5.1 Following officer discussions on the proposed distribution of the strategic capital allocation for road improvements, the following schemes are put forward for Committee approval:
 - a) Road improvement projects for the A832 Slattadale (0.6km) and A890 Strathcarron (0.65km) which will include widening and a bridge replacement. The designs for these projects are almost complete, at a cost of £2.2M;
 - b) Infirmary Bridge in Inverness to be allocated £550,000 for maintenance works;
 - c) Portree link Road to be allocated £200,000;
 - d) Renewable Energy Developer Match Funding to be allocated £500k;
 - e) Match funding of £330,000 for additional Strategic Timber Transport Schemes (STTS) on the A897 (Sutherland) and B9176 (Ross and Cromarty);
 - f) Three schemes in Caithness and Sutherland identified as requiring major maintenance from the Scottish Road Maintenance Condition Survey (SRMCS) results to be allocated £553,000 as future Area budgets were unlikely to be able to cope with this work; and
 - g) The remainder of the budget (£3.067M) to be allocated to surface treatments such as resurfacing and surface dressing, to improve the road condition of the strategic network.
- 5.2 A summary of the projects and their cost estimates are shown in **Table C** below. It is expected that underspends in any project will be used for further carriageway and footway surface treatment works and ancillary items such as minor structures, cattle grids, vehicle restraint systems (safety fencing), signs, drainage, etc.

Hierarchy	Scheme Description	Cost Estimates	Budget Percentage (%)
H1	A832 Slattadale	£1.2M	16.2
	(0.6km on line widening)		
H2a	A890 Strathcarron	£1.0M	13.5
	(0.65km on line widening)		
N/A	Infirmary Bridge (Inverness)	£0.55M	7.4
N/A	Portree Link Road	£0.2M	2.7
N/A	Renewable Energy Match Fund	£0.5M	6.8
H2a & H2b	STTS Match Funding	£0.33M	4.5
H2a	Major Maintenance (3 schemes)	£0.553M	7.5
H1 to H2b	Road Surface Treatments	£3.067M	41.4
	Totals	£7.4M	100

Table C – £7.4M Strategic Capital Allocations

5.3 In the above allocations, there may be opportunities to obtain match funding or other investments for Infirmary Bridge. If the full £550k allocation is not required, further surface treatments can be included. Details of Infirmary Bridge and the other schemes to be delivered by the PDU are in **Appendix D**.

6 Road Surface Treatment Programme

- 6.1 As previously stated, the strategic element of the £20M additional capital funding was to be allocated on a needs basis. However, resurfacing or surface dressing schemes have been identified in every Roads and Transport Operational Area of Highland. Members will understand that the current condition of the road network means that it is likely that maintenance schemes will always be required in each Area and we need to look at addressing the condition of the strategic network to assist with the economic recovery of the region. The strategic network allows for the transfer of goods, personal or work journeys and tourism between harbours or other travel centres such as Inverness Airport and the Trunk Road network. This enables people and goods to make efficient onward journeys as well as enjoying the benefits of the Highland region.
- 6.2 As with all Scottish Roads Authorities, the Council invests in the annual Scottish Road Maintenance Condition Survey (SRMCS). The results from this survey are available to staff to assist in the selection of schemes. Utilising digital information is a key priority of the Council to provide 'opportunities for efficiency, productivity and effectiveness'. Although the survey is used as a starting point, site visits, road safety inspections, incident reports (accidents on the road) and other factors such as local knowledge, claims for compensation or reports from the public and Members are also considered.
- 6.3 The SRMCS results include information on texture, cracking, profile and rutting. In some cases, a road may 'look' acceptable, but the texture is an issue and surface dressing may be applied to address it. Members and the general public may not always know the technical and safety reasons why a particular section of road has been, or is proposed to be, treated and that can cause queries to be raised. However, we are reliant on our technical staff to make technical decisions based on the information they have and knowledge of the road network, including other proposed works by external companies such as utilities.
- 6.4 Additionally, Members now recognise that roadworks are subject to a legal requirement for all Roads Authorities to register works on the roads works register. This includes location, duration and dates. Advanced notification timescales are dependent on the size and duration of works. All works on the road proposed under 5.4 would be expected to require 3 months' notice of starting. Members can therefore anticipate that some of the proposed schemes, especially for resurfacing and surface dressing, have had notices submitted in expectation of starting over the 2021 summer months.
- 6.5 With the expectation that schemes may have to be adjusted as required due to external constraints such as utilities works and further deterioration, a rolling programme has been produced and is shown in **Appendix C**. It was derived using the SRMCS results and the potholes picked up by road safety inspections contained in our roads asset management database. The programme shows the expected cut off for the £3.067M allocation (5.2 above) and further schemes if more funding becomes available. Members should note that their allocation of £200k over the two years is to be used to fund additional schemes in their Wards. They may wish to choose from the lists provided here or be advised by the Roads Area offices as to where schemes are recommended.

(Note: a pothole factsheet is available on the Council website at the link below. https://www.highland.gov.uk/downloads/file/20457/pothole_factsheet)

6.6 To further clarify, as another SRMCS will be undertaken in 2021/22, the results from this will be analysed again to inform the allocation of any remaining budget and Members are requested to note that Engineers may require to adjust programmes to keep them up to date with current circumstances. It would be beneficial to have extended, rolling resurfacing and surface dressing programmes, in accordance with asset management principles, which are adjusted as required to suit the resources available. This has already been adopted by Members for the 'Bridges, Retaining Walls and Culverts' line of the Roads and Transport capital programme as it was recognised that works will span multiple financial years. The same principle applies to surface treatment works as drainage, pre-patching and the road works register notifications require to be addressed in advance, which could be in the preceding financial year. The Council key priority of setting 'a three-year budget which will seek to make the Council as efficient as possible' supports the asset management standard of creating rolling programmes of work.

7 Carriageway Treatment Summary

7.1 To summarise the proposed rolling programme in **Appendix C**, the following table shows the estimated amounts of resurfacing and surface dressing.

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	Resurfacing (m)	Surface Dressing (m)	Estimated Cost
Lot 1	20086	7250	£3.065M
Lot 2	5757	3235	£0.919M
Totals	25843	10485	£3.984M

Table D: Rolling Programme Summary

- 7.2 The above shows that we can generate more carriageway surface treatment schemes than we have budget for. Utilising the Scheme Manager system, with the SRMCS data, in the roads asset management database gives the following results for proposed works at a cost of over £104M:-
 - 3 major maintenance schemes totalling 703m in length at a cost of £553,000;
 - 2,122 resurfacing schemes with a total length of just over 822.5km at a cost of £97M; and
 - 539 surface dressing schemes with a total length of 205km at a cost of £6.6M

8 Capital Budget From 2023/24

8.1 The current injection of capital funding is welcome; however, Members are reminded of the short duration of this and the projected reduction that the roads capital budget will have from 2023/24. This is shown in **Table E** below where the capital budget reduces to £4.5M from 2024/25.

Table E: Capital Road Maintenance Budgets

Year	2020/21	2021/22	2022/23	2023/24	2024/25
Total	£7.2M	£17.2M	£17.2M	£7.2M	£4.5M

8.2 With a steady state figure required of £25M per annum, it will not be possible to maintain the road network with a capital allocation of only £4.5M. The lower budget will also have severe repercussions for the direct labour organisation who rely heavily on income generated from capital funded road maintenance schemes.

9 **Deliverability of Programme**

- 9.1 The Capital Programme will be delivered via a bringing together of internal and external resources:-
 - In-house Area Maintenance Teams
 - Project Design Unit
 - External Contractors
- 9.2 The in-house Area Maintenance Teams are primarily resourced to deliver Winter Maintenance, and to undertake a summer programme of roads maintenance activities both cyclical and capital based on the traditional base budget allocation. The enhanced investment in roads for 20/21 and 2022/23 will require an increase in capacity of these resources and it is therefore proposed to programme some of these works to be undertaken during early evenings and weekends, subject to compliance with the working time directive, for which overtime payments would be applicable. By doing this, there will be greater efficiencies created through teams being able to complete projects using the longer days.
- 9.3 The Project Design Unit will also be engaged to undertake design work for schemes to be delivered both internally though the in-house teams, and the development of block contracts for the procurement of external resources to support the delivery of the programme. Internal discussions have taken place to agree the resourcing of tasks.
- 9.4 External Contractors will be commissioned through the Framework Agreement as necessary to ensure delivery of the programme within target timescales.
- 9.5 The Service is currently reviewing the internal deployment of teams to assist with the design, contracting and delivery of both in-house and sub-contracted projects. This involves taking forward at pace the outcomes of the Engineering review recently agreed at the Redesign Board. The outcomes of this work will ensure that capacity is created to deliver the full programme of work using a mix of in-house and external contractors, and will ensure additional capacity is created to deliver even more improvement projects should additional investment be made available particularly if the work can be profiled more towards the 2022/23 financial year (and beyond). The employment of youth trainees and modern apprentices is an essential element of this work and forms an important part of the strategy to continue to grow and support the in-house team, in line with the workforce planning strategy.

10 Investment in Plant

- 10.1 Of the £20M allocated, it has been agreed that £1M over 2 years will be for the acquisition of additional specialised Vehicles / Fleet. Following discussion with the Roads Operations Managers and the Transport & Logistics Manager, the following priorities for this investment have been identified:-
 - 2 x 18T Dedicated Hotboxes £200K
 - 2 x Road Sweepers £350K
 - 4 x Holders/Chassis plus attachments £500K

10.2 If further investment in plant should become available, there would be the opportunity to consider acquiring additional specialised vehicles including the potential of new designs e.g. JCB Pot-hole Repairer, and Nuphalt Patcher. It would also be possible to consider replacing some of the older existing plant which are susceptible to breakdown to improve efficiencies.

11.0 **Communications**

- 11.1 Members will be kept informed about the progress of programme delivery though Area Road Briefings and reports to E & I Committee.
- 11.2 Progress will also be regularly promoted on Social media and the website by the Corporate Communications Team using news releases and photos.

Designation:	Executive Chief Officer Infrastructure and Environment
Date:	23 April 2021
Author:	Elizabeth Maciver, Senior Engineer (Asset Management) Tracey Urry, Head of Roads & Transport
Background Papers:	ECI/6/21 Roads Investment Budget Distribution – Capital ECI/38/20 Road Structures Annual Report HC/2/20 Revenue budget 2021/21 to 2022/23 Local Voices, Highland Choices 2017-2022 Corporate Risk Register, March 2021 Pothole Factsheet

	Inverness		1,027.1	348.5	179	78,823	16,537	16.85%	16.48%	20.36%	16.68%	18.42%		£628,459	£1,066,820	£.164,/30	132,358	£153,191	cUc, P0.4						£2,110,723		£517,017	£386,920										£903,937					£360,244	£265,316	£700,000		£1.325.560	£2,229,497	
	Lochaber		670.5	73.1	230	19,930	3,533	6.09%	9.90%	9.61%	11.86%	11.68%		£227,154	£1640,825	198,987	18/18/3	£32,128 500 000	£02,003			I			£1,102,374	111 1000	£36/,/45	£245,282										£613,026					£256,235	£168,193	£200,000		£624.428	£1,237,454	
	Badenoch & Strathspey		387.2	74.3	8	13,664	2,654	9.36%	5.63%	5.69%	6.35%	9.36%		£349,256	£.364,554	\$20,312	207,11,3	£.24,505	£.34,383						£840,565	0100 0100	£196,8/6	£196,507										£393,384					£137,178	£134,748	£100,000		£371.926	£765,310	
	Nairn		308.0	60.3	32	12,566	2,041	2.29%	4.48%	4.69%	4.65%	5.04%		£85,610	167'067'4	£44,842 55,555	10,900	£.18,9U/	¥11,532						£460,155		£144,100	£105,899										£249,999					£100,405	£72,617	£100,000		£273.022	£523,021	
	Island of Skye		621.0	37.7	112	10,177	878	9.99%	8.82%	7.83%	10.94%	11.38%		£3/2,/11	£5/0,/6/	£00,100	£1/,033	±0,133 040.000	±40,300						£1,097,776	100 0000	£339,107	£238,991										£578,097					£236,281	£163,879	£100,000		£500.160	£1,078,258	
	Ross & Cromarty		1,653.5	303.5	308	56,666	11,516	22.69%	24.30%	24.32%	21.38%	19.64%		£846,269	£1,5/2,884	±.242,902	146,592	£100,073	£.110,391						£2,928,377	000 000	£662,899	£412,383										£1,075,282					£461,891	£282,777	£500,000		£1.244.668	£2,319,950	
(1	Sutherland		1,336.7	106.2	282	13,820	2,253	21.69%	19.45%	16.45%	17.47%	12.00%		£809,240	£1,258,852	£134,453	1.38,891	1/8/17	¥1U1,622						£2,423,928	000 11 000	£541,620	£252,073										£793,693		I			£377,387	£172,850	£200,000		£750.237	£1,543,929	
(ver 1.0, 22/04/21)	Caithness		761.9	123.8	3 3	26,486	3,768	9.41%	10.95%	11.05%	10.67%	12.47%		£351,214	£/08,/98	£.109,467	189/174	£.34,9U5	£33,514						£1,259,815	000 0000	£330,636	£261,946										£592,582					£230,379	£179,620	£200,000		£609.999	£1,202,581	
AL	На							1.62%						£80,795	£20,000						*:00,000			£1.223.306	£2,019,101			0100 000	£500,000	000 004	£650 000	£100.000	£75 000	£20,000	£20,000	£25,000	£100,000	£2,000,000			£3,700,000					£500,000	£4.300,000	£6,300,000	
ar 2021/22	Total		6,766	1,127	1332	232,132	43,180	100%	100%	100%	100%	100%		£4,974,018	£6,493,797	*1,000,000	100,000.4	£400,000	£480,000		±00,000		ren nnn	200	£14,242,815	000 000 00	£3,100,000	£2,100,000	£500,000	£10,000	£650 000	£100 000	£75 000	£20,000	£20,000	£25,000	£100,000	£7,200,000			£3,700,000	£3,600,000	£2,160,000	£1,440,000	£2,100,000	£500,000	£10.000.000	£17,200,000	£31,442,815
Roads Budget Allocation - Year 2021/22 FIN	Description	Parameters	1 Total Road Length (km)	2 Urban Road Length (km)	3 Number of Bridges	4 Population(Year 2011)	s Gullies (WDM db)	6 Winter Allocation	7 Weighted Mileage	s Watercourse	9 Structural Maint. (SRMCS)	10 Surface Dressing (SRMCS)	KEVENUE	21 Winter Allocation (75% of Area budget)	61	22a Additional £1M Kevenue (Cyclic)	23 Urainage	25 Guily Emptying	26 bridges - Structural Maintenance	27 bridge inspections	28 Caute Grids	29 Callety Datriets (VNO)	30 Water Course Maintenance	(25% of Area Winter budgets unallocated)	Total Revenue Budget		32 Structural Overlay/ Inlay	33 Surface Dressing	34 Area Koad Improvements	35 0110	36 OUNIM 37 Bridde Maintenance (Structures)	se Road Markines	a Weather Stations	40 Minor Network Improvements	41 Cattle Grids	42 Safety Barriers (VRS)	43 Large Directional Signs	Total Capital	CADITAL 510M for 2021/22	Chatacia Assats and Structural Maintanance	autopic Assess and automutat maintenance 44 (including PDU Schemes)	45 Area Structural Maintenance (45a and b)	45a Structural Overlay/ Inlay	45b Surface Dressing	46 Ward Allocation (£100k/ward)	47 Fleet (Specialised Veh/Plant)	48 Active ITavel Total £10M Capital Budget	Total Capital Budgets	Total Revenue + Capital Budgets

Appendix A – Roads Budget Allocation 2021/22

Appendix B - Road Network Hierarchy Descriptions

THC Category	Hierarchy Description	General Road Description	Description
H1	Strategic Route	Routes connecting main settlements, transport links and important economic development to the Trunk Road network.	Routes for fast moving traffic with little frontage access or pedestrian traffic. Speed limits usually in excess of 40mph and there are few junctions. Parked vehicles are generally not encountered out with urban areas.
H2a	Regional Route	Major urban and rural network and inter- settlement links.	Routes connecting local centres to the Trunk or Strategic road networks with limited frontage access. Transport corridors between main and local settlements.
	Main Distributor		Main routes within urban areas linking commercial and residential areas where speed limits are typically 40mph or less.
H2b	Sub-regional Route	Rural routes linking the larger villages to the main network. Urban routes linking the main distributors.	In rural areas these roads link the larger villages to the Trunk, Strategic and Regional Route Network.
	Local Distributor		In built up areas these roads have 30mph speed limits and pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons.
H3a	Link Road	Rural routes linking the smaller villages to the higher network with frontage access and frequent junctions. Urban interconnecting routes.	In rural areas these roads link the smaller villages to the main network. They are of varying width and not always capable of carrying two-way traffic. In urban areas they are residential or industrial interconnecting roads with 30mph speed limits, random pedestrian movements and uncontrolled parking.
H3b	Local Access Road	Roads serving limited numbers of properties carrying only access traffic.	In rural areas these roads serve more than four properties and small settlements. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop roads or cul-de-sacs.
H4	Minor Rural Road	Minor rural roads which serve four properties or less or provide access to the countryside.	In rural areas these roads provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. These roads include those with no specific destination.

Appendix C - Roads and Transport Projects

Area Hierarchy		Route	Description	Length (m)	Treatment
Caithness	H2a	A882	Wick to Georgemas	230	Major
Sutherland	H2a	A894	B869 Junction - A838 Junction	280	Major
Sutherland	H2a	A894	B869 Junction - A838 Junction	193	Major
Estimated To	otal of Projec	cts Abov	ve: £0.553M		

Table C.1: Major Maintenance Schemes

Table C.2: STTS Schemes

Area	Hierarchy	Route	Description	Length (m)	Treatment
RC	H2a	B9176	Struie Hill	24000	Structural,
Sutherland	H2b	A897	Helmsdale to Melvich	61000	Widening, Strengthening
Match Funding for Projects Above: £0.33M					

Table C.3: Carriageway Treatment – Rolling Programme

Lot 1: £3.067M Allocation					
Area	Hierarchy	Route	Description	Length (m)	Treatment
RC	H1	A832	Near Kerrysdale	200	Resurface
Skye	H2b	A855	Staffin Road, Portree	444	SD
Lochaber	H1	A884	Carnoch 1	182	Resurface
RC	H1	A835	North of Ullapool	346	Resurface
Sutherland	H1	A837	Inchnadamph (Near to)	150	Resurface
Sutherland	H1	A837	Loch Assynt	209	Resurface
RC	H1	A832	North of Ullapool	676	Resurface
Lochaber	H1	A884	Liddesdale	1744	Resurface
Sutherland	H1	A836	Ardgay	192	Resurface
Sutherland	H1	A837	Loch Assynt	229	Resurface
BS	H2b	A939	Bridge of Brown	1240	SD
Caithness	H2a	A882	Watten	1628	Resurface
Skye	H1	A851	Duisdalemore	520	Resurface
Inverness	H1	B865	Academy/ Chapel St & Jcts	500 (est.)	Resurface
Inverness	H2b	A833	Culnakirk	1570	Resurface
Nairn	H2a	A939	A939 - A96T Jct	158	Resurface
BS	H2b	A939	Bridge of Brown	2260	SD
Skye	H1	A851	Armadale	153	Resurface
Skye	H2b	A855	Staffin Road, Portree	215	SD
Caithness	H2a	A882	Watten	268	Resurface
Skye	H2b	A855	Staffin Road, Portree	478	SD
Lochaber	H1	A884	White Glen	210	Resurface
Lochaber	H1	A884	Acharn	550	Resurface
RC	H2a	A832	Garguston	290	Resurface
Lochaber	H1	A884	Liddesdale	160	SD
RC	H1	A832	Near Kerrysdale	535	Resurface
Lochaber	H1	A884	Carnoch 2	712	Resurface
RC	H1	A832	Near Kerrysdale	725	Resurface
Caithness	H2a	A882	Watten	240	Resurface
Skye	H2b	A855	Staffin Road, Portree	231	SD

Lochaber	H1	A884	Carnoch 3	170	Resurface
Skye	H1	A851	Armadale	150	SD
Caithness	H1	A836	Castletown Road, Thurso	282	Resurface
Inverness	H2b	A862	Inchmore	692	Resurface
Lochaber	H1	A884	Carnoch 4	268	Resurface
Sutherland	H1	A837	Loch Assynt	311	Resurface
Lochaber	H1	A861	Inversanda	150	Resurface
Inverness	H2b	A862	Clachnaharry	300	Resurface
Lochaber	H1	A884	Kinlochaline	233	Resurface
Nairn	H2a	A939	A939 - C1161 Jct	160	SD
Skye	H2b	A863	Dunvegan	829	SD
Inverness	H2b	A862	Beauly	289	Resurface
RC	H1	A832	Corriemollie	400	Resurface
Lochaber	H1	A861	Sallachan	182	Resurface
Inverness	H2b	A833	Culnakirk	372	Resurface
Sutherland	H1	A838	Loch Stack	775	Resurface
RC	H1	A832	Near Kerrysdale	270	Resurface
Caithness	H1	A836	Main St, Castletown	261	SD
Sutherland	H1	A837	Brackloch	166	Resurface
Caithness	H1	A836	Меу	247	Resurface
Skye	H2b	A855	Staffin Road, Portree	248	Resurface
Sutherland	H1	A836	Ardgay	203	Resurface
Sutherland	H1	A838	Laxford Bridge (near to)	270	Resurface
Skye	H2b	A863	Gearymore (near to)	200	Resurface
Caithness	H2a	A882	Watten	220	Resurface
Caithness	H2a	A882	Watten	160	Resurface
Skye	H2b	A850	Blackhill (near to)	183	Resurface
BS	H2a	A938	Tullochgribban	472	Resurface
Skye	H2b	A855	Loch Leathan	200	Resurface
Skye	H2b	A855	Staffin Road, Portree	262	SD
BS	H2a	A938	Dalbuiack	560	SD
Skye	H2b	A850	Dunvegan	196	Resurface
Skye	H2b	A855	Loch Leathan	640	Resurface
Estimated Total of Projects Above: £3.065M					

Table C.4: Carriageway Treatme	ent – Rolling Programme
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Lot 2: Further scheme examples below for any funding that becomes available					
Area	Hierarchy	Route	Description	Length (m)	
Sutherland	H2b	A897	Kinbrace (near to)	492	Resurface
Inverness	H2b	A831	Cannich (near to)	396	Resurface
Inverness	H2a	A833	Glen Convinth	1280	Resurface
RC	H2a	A890	Braeintra (near to)	150	Resurface
Sutherland	H2a	A838	Rhiconich (near to)	200	Resurface
Skye	H2b	A855	Lower Tote	160	Resurface
Caithness	H1	A836	East Canisbay (near to)	210	Resurface
Sutherland	H2b	A897	Kinbrace (near to)	410	Resurface
Sutherland	H2b	A897	Croick (near to)	200	Resurface
BS	H2a	A938	Carrbridge Jct	156	SD
BS	H2a	A938	Tullochgribban	178	SD
Skye	H2b	A863	Gearymore	210	Resurface
Skye	H2b	A855	Loch Leathan	1598	SD
Skye	H1	A851	Armadale	183	SD
Nairn	H2a	A939	Near Littlemill	180	Resurface
Nairn	H2a	A939	Logie Bridge	300	Resurface
Sutherland	H1	A837	Little Assynt	289	Resurface
Sutherland	H1	A837	Inchnadamph (Near to)	470	Resurface
BS	H2b	A939	Bridge of Brown	450	SD
Nairn	H2a	A939	Ferness (near to)	190	Resurface
Nairn	H2a	A939	Nairn	310	SD
Nairn	H2a	A939	Littlemill	210	SD
BS	H2a	A939	Lochnellan	210	Resurface
BS	H2a	A939	Drumguish	240	Resurface
BS	H2b	A939	Bridge of Brown	150	SD
BS	H2a	A939	Bridge of Dava Jct	170	Resurface
Estimated T	otal of Projec	ts Abov	e: £0.919M		

Appendix D – Project Design Unit Schemes

No.	Project and Description
1	Portree Link Road: £200k
	Portree Link Road is the final section of a local distributor road which extends from the A87 Dunvegan Road, through Home farm and links with the A855 Staffin Road. The link road will not only provide an alternative route for traffic in Portree but will also open up alternative active travel routes. Much of the distributor road has been constructed, associated with housing developments, but the final section, making the link to the Staffin Road remains outstanding.
	In excess of 250 residential housing will be unlocked by the construction of the link.
	The link is budgeted to cost $\pm 1.6M$, however developer contributions of c $\pm 1.4M$ is expected to be received, and the funding allocation is the balance.
	Upfront funding by the Infrastructure Loan Fund, will allow design and consenting works to commence immediately with construction planned for 2022/23. Note the developer contributions as received together with the Highland Council budget allocation will enable the loan fund to be paid off in full.
2	Infirmary Bridge, Inverness: £550K* (Possible Match Funding)
	 Infirmary Bridge is a suspension footbridge across the River Ness. It is a Category B listed structure and is a well-used and valuable active travel route. Following a structural assessment, the bridge is closed during events likely to cause high volumes of people on the bridge. The condition of the bridge is such that if no works are undertaken it is likely to be closed within 5 years. Monthly assessments are undertaken to monitor its condition so that immediate closure could be affected if concerns arose. The recommendation is to repair the bridge to extend the life by 20-25 years, strengthening works have been discounted as the potential increase would still be insufficient to remove the crowd loading restrictions. Replacement has similarly been discounted due the cost c£4M and the listed nature of the bridge. *Funding opportunities exist, and these may include, Sustrans Active Travel, Historic Environment Scotland. Common Good Fund, Ward Discretionary Budget and the Town centre Regeneration Fund. If any sources of funding are secured this will reduce the capital allocation identified above.
	Construction would be programmed in Summer/Autumn 2022, the programme to give time to progress the environmental and statutory consents, the works will require staging in the river, and this will have to be coordinated with a time of year that will not affect the salmonids in the river.

Slattadale Phase 2 Road Scheme: £1.2M
Slattadale Phase 2 is a 0.6km long 'on line' road improvement scheme on the A832 and is part of the NC500 route. The current road is single track with passing places with the scheme providing a two-lane single carriageway road. Construction works are estimated to take 16 weeks.
This project is a continuation of the improvement of the single-track sections, and dovetails with proposals for Stage 3 (Slattadale to Kerrysdale) which is an offline scheme requiring significant levels of investment.
A890 Strathcarron Road Improvement Phase 2: £1.0M
The Strathcarron Phase 1 improvement scheme from Strathcarron Junction northwards was completed in 2014 and terminated South of Kelso Bridge. Phase 2 extends the 'on line' improvement works towards Coulags and would remove the poor tie in point from twin track to single heading East. The Scheme will dovetail into the future 'off line' improvement scheme. Phase 2 consists of a 650m upgrade of single-track road to twin track single carriageway and includes the widening of an existing bridge over the Kelso River.
Renewable Energy Developer Contribution Match Funding: £500K
Transformational funding has been secured of £150K over the next two years to fund staff to develop road improvement strategies to maximise the potential benefits associated with road mitigation for large scale renewable developments.
Such developed strategies, to maximise opportunities, will require additional land take, land purchase and accommodation works to provide for road improvements beyond the constraints of the existing road corridor.
This strategy has been used to great success on the South Loch Ness Road leveraging in excess of £10M of sustainable development road improvements.
This allocation will allow the strategy to be rolled out pan Highland as such developments come forward, to both the benefit of the road structure, improvements to the road network and benefits to local communities and economies.