#### HIGHLAND COUNCIL

Agenda Item	6
Report No	SCC/10/19

Committee: Sutherland County Committee

Date: 22 May 2019

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Report Title: Road Structural Maintenance 2019/2020

Report By: Director of Community Services

## Purpose/Executive Summary

1.1 This report sets out a prioritised list of structural maintenance works for the Sutherland Area

#### 2 Recommendations

2.1 Members are asked to approve the proposed prioritised Roads Maintenance Programme 2019/20 for the Sutherland Area.

## 3 Background

- 3.1 The Roads Budget Allocation Year 2019/20 Version 1.1 (Provisional) is now available. **See attached Item 1**.
- 3.2 Last year's 2018/19 Highland total (Revenue and Capital) was £21,649,000. This year, 2019/20, it is £19,528,775 which is £2.1M lower. Revenue has increased by £1.5 million but Capital has decreased by £3.5 million.
- 3.3 The current Revenue budget allocation for Sutherland is £2.5 million which is primarily required to cover our Labour, Plant and Salt required for Winter Maintenance for the 2019/20 season.
- 3.4 This means that there is limited capacity within the Revenue Budget to allow for the purchase of significant materials other than routine pothole repairs. It is therefore proposed that the current Capital budget allocation of £797k will be allocated towards Surface Dressing schemes and major patching works on the adopted road network, and that these will be undertaken by our in-house team.
- 3.5 The proposed Surface Dressing priorities for 2019/20 are No. 7 to 14 on the attached list. It is therefore important that Members are given the opportunity to review and agree the revised prioritised programme attached.
- 3.6 It is the intention to continually update this list by adding to it and adjusting priorities so that an updated rolling programme of works can be published early in each new year to eliminate the risk of the structural programme starting before gaining full Area Committee agreement.

#### 4 Budget Allocation

- 4.1 Road Maintenance budgets are normally allocated under the following headings:-
  - Winter Maintenance (Revenue)
  - Cyclic Maintenance(Revenue) including:-
    - Drainage
    - Footpath Maintenance
    - Gully Cleansing
    - Temporary Patching Repairs
    - Road Marking Renewal
    - Sign Maintenance
    - Verge Maintenance
    - Other Cyclic and Routine maintenance
  - Structural Maintenance (Capital) including:-
    - Structural Resurfacing (Overlay/Inlay)
    - Structural Integrity Improvements
    - Surface Dressing
    - Recycling
    - Major Patching
- 4.2 This report focuses on the Structural Maintenance (Capital) programme.

### 5 Road Structural Maintenance Programmes

- 5.1 Schemes were selected for inclusion in these programmes on the basis of need using the information gathered from the following sources and have been prioritised with the safety of the travelling public and sustainability of the road network as the main objectives:-
  - Scottish Road Maintenance Condition Survey (SRMCS) data;
  - Safety Inspections;
  - Service Inspections; and
  - Input and feedback from Members
- 5.2 The Scottish Road Maintenance Condition Survey (SRMCS) records data which is processed to show rutting, profile, cracking and surface texture. Surface texture is principally used in the preparation of surface dressing programmes. Rutting and profile data is used for surfacing programmes, while cracking data is used in both surface dressing and surfacing programmes.
- 5.3 The SRMCS survey is undertaken according to the following schedule:-
  - A class roads annually;
  - B class roads every two years; and
  - C & U class roads every three years
- 5.4 The SRMCS survey is presently up to date. The surveys are usually undertaken throughout the spring, summer and autumn but do not include winter damage due to the freeze thaw cycle.
- 5.5 The SRMCS data is processed after the survey and is displayed on Williams Detail Management (WDM) geographical information system. WDM allows the survey information to be plotted alongside roads. The information is colour coded according to the condition of the road.
- 5.6 WDM can produce a paper plan showing the damage over a wide area but the volume of data and the scale of the plan results in the data being difficult to use or handle. The system is best used interactively, using both an over view and then closer inspection at a smaller scale. Small scale prints can be produced for specific sites.
- 5.7 Given the survey frequency, the SRMCS data is only indicative of the road conditions at any one time. Additional deterioration and repairs may not be captured on the survey. Consequently additional sources of information are used.
- 5.8 All roads are inspected either monthly, quarterly or annually for safety hazards depending on their priority. Roads are also inspected in the course of preparing the works programmes. These inspections, together with specific concerns raised through Members and Community Councils, are considered for inclusion in the works programmes.
- 5.9 The programmes are prepared over the winter months and are finalised in the spring to allow for additional damage due to freeze thaw cycle. This last winter has had a serious effect on the road network. The programmes reflect both the strategic network and the importance attached to local roads by rural communities.

5.10 Prior to finalising the programmes, each site is again visited by experienced engineers to confirm the importance of the works against the network and the details of the designs.

## 6. Implications

- 6.1 Resource All work will be managed within budget allocations from a resource perspective with the Council delivering its legal responsibilities.
- 6.2 Legal The combined programme for Structural Resurfacing and Structural Integrity Improvements enables the Council to meet its duty under the Roads (Scotland) Act 1984 within the Local Committee area.
- 6.3 Community (Equality, Poverty and Rural) This report has no impact on Equality, Gaelic, Climate Change or Carbon Clever considerations. However, there may be rural considerations where the lower road usage levels and distances between communities reduce the opportunity to maximize the impact of investment decisions when compared to more densely populated area /roads with greater usage levels.
- 6.4 Climate Change / Carbon Clever No implications.
- 6.5 Risk No implications.
- 6.6 Gaelic This report has no impact on Gaelic.

Designation: Director of Community Services

Date: 8 May 2019

Author: Joanne Sutherland, Acting-up Road Operations Manager

# Item 1 – Roads Budget Allocation 2019/20 – Version 1.1 (Provisional)

Parameters	Description	Total	HQ	Caithness	Sutherland	Ross & Cromarty	Island of Skye	Nairn	Badenoch & Strathspey	Lochaber
2Uban Road Length (km)										
Albamber of Bridges   1,332   93   282   308   112   32   96   230   2	1 Total Road Length (km)	6,746		761.2	1,336.8	1,650.9	618.1	302.3	387.4	670.4
Population(Year 2011)   232,132   26,486   13,820   56,666   10,177   12,566   13,664   19,930   20,000   26,	2 Urban Road Length (km)	1,113		124.1	109.8	305.1	35.0	54.6	71.4	72.0
Scallies (WDM db)	3 Number of Bridges	1,332		93	282	308	112	32	96	230
SWINTER Allocation   100%   1.62%   9.41%   21.69%   22.69%   9.99%   2.29%   9.36%   6.09%   10.09%   10.09%   10.09%   10.09%   10.09%   10.09%   10.09%   10.09%   10.09%   10.00%	4 Population(Year 2011)	232,132		26,486	13,820	56,666	10,177	12,566	13,664	19,930
Weighted Mileage	5 Gullies (WDM db)	44,610		4,835	2,491	11,522	878	2,006	2,653	3,653
SWaterourse   100%	6 Winter Allocation	100%	1.62%	9.41%	21.69%	22.69%	9.99%	2.29%	9.36%	6.09%
Structural Maint. (SRMCS) 100% 11.35% 17.67% 22.40% 11.55% 4.37% 6.34% 11.26% 25.406 27.506 2	7 Weighted Mileage	100%		10.96%	19.49%	24.34%	8.80%	4.43%	5.65%	9.92%
REVENUE   REVENUE	8 Watercourse	100%		11.06%	16.48%	24.36%	7.82%	4.65%	5.70%	9.62%
REVENUE	9 Structural Maint. (SRMCS)	100%		10.35%	17.67%	22.40%	11.55%	4.37%	6.34%	11.26%
Winter Allocation	10 Surface Dressing (SRMCS)	100%		11.98%	12.59%	20.06%	12.34%	4.35%	9.67%	11.12%
Winter Allocation									1	
2 Cyclic Maintenance £6,573,775 £20,000 £718,410 £1,277,192 £1,595,215 £576,624 £20,000 £20,000 £21,222 £19,815 £48,681 £17,597 £8,699 £11,291 £19,836 £30,000 £10,000 £20,000										
Solidade   E200,000   E21,924   E38,976   E48,881   E17,597   E8,859   E11,291   E19,836   E5,000   E5,000   E27,937   E2,471   E1,62   E4,481   E5,742   E9,937   E5,000   E1,285		, ,	,	,						
ESpray Injection (THC vehicle) £100,000 £11,282 £19,815 £24,471 £9,162 £77,485 £5,905 £13,490 £17,841 £24,566 £810,900 £275,000 £200,000 £200,000 £33,514 £101,622 £110,991 £40,360 £11,532 £34,595 £82,833 £24 £109,900 £80,0	,	, ,	£20,000	,						
ES Gully Emptying £300,000 £32,515 £16,752 £110,991 £40,360 £17,841 £24,566 £110,692 . Structural Maintenance £480,000 £200,000 £33,514 £101,622 £110,991 £40,360 £11,532 £34,595 £82,883 72 80 Safety Barriers (Bid to HQ) £80,000 £80,000 £275,000 £										
EBridges - Structural Maintenance £480,000 £200,										
Experience   E200,000   E200,000   E200,000   E200,000   E200,000   E275,000										
ECATILE Grids (Bid to HQ) £80,000 £80,000 £275,0				£33,514	£101,622	£110,991	£40,360	£11,532	£34,595	£82,883
Safety Barriers (Bid to HQ) £275,000 £275,000 £80,000 £80,000 £80,000 £60,000										
Water Course Maintenance (Bid to HQ)	,									
Asset Management (Mobile Working) £60,000 £60,000 £1,110,000 £559,464 £797,721 £1,093,304 £603,707	, , ,		,							
Total Revenue Budget £13,328,775 £795,892 £1,286,493 £2,534,641  Capital Budget (£6.2M)  Structural - Overlay/Inlay £3,090,000 £319,811 £545,901 £2986,558 £1,147,200  E42 Structural - Overlay/Inlay £3,090,000 £239,652 £251,819  Timber Transport Routes (STTS) £500,000 £500,000 £350,000 £350,000 £66 Road Markings £60,000 £50,0	· · · · · · · · · · · · · · · · · · ·	,								
Capital Budget (£6.2M)  \$\frac{\text{Capital Budget}}{\text{Dec Sting}} \frac{\text{£3,090,000}}{\text{£2,000,000}} \frac{\text{£319,811}}{\text{£239,652}} \frac{\text{£545,901}}{\text{£251,819}} \frac{\text{£692,149}}{\text{£46,755}} \frac{\text{£356,953}}{\text{£87,054}} \frac{\text{£195,758}}{\text{£193,423}} \frac{\text{£222,497}}{\text{£222,497}} \frac{\text{£10,000}}{\text{£600,000}} \frac{\text{£500,000}}{\text{£500,000}} \text{£	31 Asset Management (Mobile Working)	£60,000	£60,000			_				
Capital Budget (£6.2M)  \$\frac{\text{Capital Budget}}{\text{Dec Sting}} \frac{\text{£3,090,000}}{\text{£2,000,000}} \frac{\text{£319,811}}{\text{£239,652}} \frac{\text{£545,901}}{\text{£251,819}} \frac{\text{£692,149}}{\text{£46,755}} \frac{\text{£356,953}}{\text{£87,054}} \frac{\text{£195,758}}{\text{£193,423}} \frac{\text{£222,497}}{\text{£222,497}} \frac{\text{£10,000}}{\text{£600,000}} \frac{\text{£500,000}}{\text{£500,000}} \text{£	Total Revenue Budget	£13 328 775	£705 802	£1 286 /03	£2 534 641	£2 986 558	£1 147 200	£442 038	£905 682	£1 090 447
22 Structural - Overlay/Inlay	Total Nevenue Buuget	213,320,773	2133,032	21,200,433	22,334,041	22,300,330	21,147,200	2442,330	2303,002	21,030,447
\$\frac{33}{4}\$ Surface Dressing \frac{£2,000,000}{£500,000} \frac{£239,652}{£251,819} \frac{£246,755}{£401,155} \frac{£246,755}{£87,054} \frac{£193,423}{£222,497} \frac{£222,497}{£350,000} \frac{£350,000}{£500,000} \frac{£500,000}{£500,000} \frac{£500,000}{£500,000} \frac{£500,000}{£500,000} \frac{£500,000}{£500,000} \frac{£500,000}{£500,000} \frac{£500,000}{£500,000} \frac{£45,000}{£45,000} \frac{£45,000}{£45,	Capital Budget (£6.2M)									
## Timber Transport Routes (STTS)	32 Structural - Overlay/Inlay	£3,090,000		£319,811	£545,901	£692,149	£356,953	£135,164	£195,758	£348,015
## Bridge Maintenance (HQ/Structures)	33 Surface Dressing	£2,000,000		£239,652	£251,819	£401,155	£246,755	£87,054	£193,423	£222,497
86 Road Markings       £60,000       £60,000         87 Weather Stations (Icelert)       £50,000       £50,000         88 Transportation Infrastructure(Bid to HQ)       £50,000       £50,000         89 Cattle Grids(Bid to HQ)       £45,000       £45,000         80 Safety Barriers (Bid to HQ)       £45,000       £45,000         10 SCRIM       £10,000       £10,000         11 Total Capital       £6,200,000       £1,110,000       £559,464       £797,721	34 Timber Transport Routes (STTS)	£500,000	£500,000							
## Weather Stations (Icelert)	35 Bridge Maintenance (HQ/Structures)	£350,000	£350,000							
## Transportation Infrastructure(Bid to HQ) £50,000 £50,000 £50,000 ## Cattle Grids(Bid to HQ) £45,000 £45,000 ## Cattle Grids(Bid to HQ) £45,000 £45,000 ## SCRIM £10,000 £10,000 £10,000 ## £6,200,000 £1,110,000 £559,464 £797,721 £1,093,304 £603,707 £222,218 £389,181 £570,512	36 Road Markings	£60,000	£60,000							
99 Cattle Grids(Bid to HQ) £45,000 £45,000 100 Safety Barriers (Bid to HQ) £45,000 £45,000 111 SCRIM £10,000 £10,000 112 Total Capital £6,200,000 £1,110,000 £559,464 £797,721 £1,093,304 £603,707	37 Weather Stations (Icelert)	£50,000	£50,000							
10 Safety Barriers (Bid to HQ)	38 Transportation Infrastructure(Bid to HQ)	£50,000	£50,000							
Total Capital £6,200,000 £1,110,000 £559,464 £797,721 £1,093,304 £603,707 £222,218 £389,181 £570,512	39 Cattle Grids(Bid to HQ)	£45,000	£45,000							
Total Capital £6,200,000 £1,110,000 £559,464 £797,721 £1,093,304 £603,707 £222,218 £389,181 £570,512	40 Safety Barriers (Bid to HQ)	£45,000	£45,000							
	41 SCRIM									
£19,528,775	Total Capital	£6,200,000	£1,110,000	£559,464	£797,721	£1,093,304	£603,707	£222,218	£389,181	£570,512
£19,528,775										
		£19,528,775								

# Prioritised Sutherland Surfacing and Surface Dressing 2019/2020

Priority	Activity	Locality	Site Description	Scheme Length (m)	Average Road Width (m)	Total Area (m²)
1	Pothole repairs	Sutherland	All routes			
2	Surfacing	Dornoch	Ospisdale	500	3	1500
3	Surfacing	Dornoch	Camore Crescent	300	5.5	1650
4	Surfacing	Bonar Bridge	Bonar - Ardgay Edge Strengthening	250	2	500
5	Surfacing	Ardgay	Easter Fearn	600	5.5	3300
6	Surfacing	Rogart	West Langwell	2500	3	7500
7	Surface Dressing	Gunns Wood	2016 resurface	1000	5.6	5600
8	Surface Dressing	Rosehall Brae	2016 resurface	1000	4.5	4500
9	Surface Dressing	Morness	2017 resurface	1200	3	3600
10	Surface Dressing	East of Fiag	2017 resurface	1500	3	4500
11	Surface Dressing	Rosehall	Oykel Brae	1000	2.8	2800
12	Surface Dressing	Crask	Trampies Cairn - Little Bridges	3200	3	9600
13	Surface Dressing	Lairg	West Shinness - Aultnagurach 2016 surfacing	3000	2.8	8400
14	Surface Dressing	Rosehall	Durcha - Memorial	2000	2.8	5600
15	Surface Dressing	Meikle Ferry	Meikle Ferry to Redburn	2000	6	12000
16	Surface Dressing	Keodale	Keodale	900	3	2700
17	Surface Dressing	Rispond	Rispond to Portnacon	5000	3	15000
18	Surface Dressing	Easter Fearn	Struie Junction to Easter Fearn	1200	6	7200
19	Surface Dressing	Bighouse		1800	2.8	5040
20	Surface Dressing	Ferry Road		4500	2.8	12600
21	Surface Dressing	Balnakeil		2000	3	6000
22	Surface Dressing	Smoo Road		400	2.8	1120

23	Surface Dressing	Ardmore		2000	2.7	5400
24	Surface Dressing	Cuthill		3000	2.8	8400
25	Surface Dressing	Clerkhill		800	2.7	2160
26	Surface Dressing	Skerray Loop		2000	2.8	5600
27	Surface Dressing	Skelbo		1550	2.8	4340
28	Surface Dressing	Armadale to Brawl		1500	5.5	8250
29	Surface Dressing	Strathy West		800	2.8	2240
30	Surface Dressing	Rosehall	War Memorial to Linside	6500	3.5	22750
31	Surface Dressing	Bettyhill		200	2.7	540
32	Surface Dressing	Lairg	Rhaoine - Riemarstaig	2000	5.6	11200
33	Surface Dressing	Inverkirkaig	Either side of the bridge	2000	2.7	5400
34	Surface Dressing	Dornoch - Embo	2016 Surfacing	1200	6	7200
35	Surface Dressing	Trantlemore		3000	2.7	8100
36	Surfacing	Old Pier Road	Kinlochbervie	200	3	600
37	Surfacing	Spinningdale	Fairy Glen	2500	2.7	6750
38	Surfacing	Elphin	Elphin Loop Road	475	2.7	1282.5
39	Surfacing	Stanke		300	3	900
40	Surfacing	Loth	Whitehill / Ross Place	700	3	2100
41	Surfacing	Lairg	Achnairn	1000	2.7	2700
42	Surfacing	Kildonan	Kildonan Lodge	300	3	900
43	Surfacing	Lairg	Dalchork - North Dalnessie	1500	3	4500
44	Surfacing	Edderton	Mudh a Blair	750	3	2250
45	Surfacing	Edderton	Ardmore Loop	300	3	900
46	Surfacing	Strathy East		400	3	1200
47	Surfacing	Forsinard		2000	3	6000
48	Surfacing	Spinningdale	Oakwood Edge Strengthening	400	2	800
49	Surfacing	Ledmore	Craggie Cattle Grid - Loch Craggie	1000	3	3000
50	Surfacing	Golspie	Grant Crescent	100	5.5	550
51	Surfacing	Borgie Quarry		50	5.5	275

						1
52	Surfacing	Elphin	Ledmore - Luirgean	800	5.5	4400
53	Surfacing	Mound	Torboll	500	3	1500
54	Surfacing	Mound	Torboll	750	3	2250
55	Surfacing	Drumbeg	Drumbeg - Nedd	5000	2.7	13500
56	Surfacing	Bettyhill		200	2.7	540
57	Surfacing	Dornoch	Cromartie Road	275	4.4	1210
58	Surfacing	Dornoch	Stafford Road	400	5.5	2200
59	Surfacing	Loyal		4000	4	16000
60	Surfacing	Rhifail		400	3	1200
61	Surfacing	Golspie	Lindsay Street	180	5.5	990
62	Surfacing	Dornoch	St Gilbert Street	120	6	720
63	Surfacing	Invershin	Invershin Houses	100	8	800
64	Surfacing	Braetongue		1000	3	3000
65	Surfacing	Dornoch	High Street	120	7.5	900
66	Surfacing	Embo	Shore Road	800	3	2400
67	Surfacing	Lairg	Altnagar - Achinduich	1000	5.5	5500
68	Surfacing	Brora	Jimmy Gunns West Clyne	100	3	300
69	Surfacing	Bhlarmore		300	3	900
70	Surfacing	Loth	Glen Loth	700	3	2100
71	Surfacing	Kinbrace	Kinbrace North	1000	3	3000
72	Surfacing	Rogart	Eiden	500	3	1500
73	Surfacing	Skarray	Modsarie - Strathan	300	3	900
74	Surfacing	Spinningdale	Council Houses	100	3	300
75	Surfacing	Bonar Bridge	Craigton	1000	2.7	2700
76	Surfacing	Trentham - Skelbo	Various Sections	600	2.7	1620
77	Surfacing	Cape Wrath				0
78	Surfacing	Kinbrace	Harvieston - Badenloch	4000	2.7	10800
79	Surfacing	Telford Bridge	Helmsdale	300	4	1200
80	Surfacing	Craigton	Bonar Bridge	3000	2.7	8100

81	Surface Dressing	Ledmore	Stronchrubie 2018 Surfacing	300	5.5	1650
82	Surface Dressing	Ledmore	Lyne Straight 2018 Surfacing	1250	5.5	6875
83	Surface Dressing	Scourie	Duartmore 2018 Surfacing	600	5.5	3300
84	Surface Dressing	Scourie	Clasfern 2016 surfacing	600	5.5	3300
85	Surface Dressing	Elphin	2015 resurfacing	200	2.8	560
86	Surface Dressing	Clashmore	2015 resurfacing	1000	6.3	6300