

WINTER SERVICE POLICY 2020/21

1.0 EXECUTIVE SUMMARY

- 1.1 Each year Members consider for approval the Council's Winter Service Policy. The format and general content of the Winter Service policy 2020/21 remains similar to 2019/20, with the exception of a COVID 19 Vehicle Usage Guidelines (Appendix 5).
- 1.2 The policy sets out priorities for treatment and routes which will be 'pre-treated' in advance of winter hazards. In prolonged winter conditions the policy provides for all roads to be treated with resources being allocated to focus on the hierarchy of priorities (i.e. the lower priorities will only be cleared once the higher priorities have been treated and are clear).
- 1.3 The policy is a comprehensive document setting out the management, governance and operational requirements for the winter service. The policy sets out signing provision to warn the travelling public of roads which are unsuitable for use during extreme winter conditions. The policy also provides a protocol for the reduction in use of salt and preservation of remaining stocks in the unlikely event of replenishment salt stocks not being available. This was introduced following the severe winters of 2009/10 and 2010/11. The policy further provides a protocol for the use of vehicles during COVID19 to ensure appropriate safety for staff (Appendix 5).
- 1.4 It is recommended that the Committee:-
- Notes the proposals for community resilience
 - Notes weather summary from 2019/20 at Appendix 1
 - Approves the 2020/21 Winter Maintenance Policy at Appendix 2
 - Notes the Advisory signing, routes unsuitable in severe conditions at Appendix 3
 - Approves the Salt Use Reduction and Preservation of Stocks Protocol at Appendix 4.
 - Approves the Use of Vehicles during COVID-19 guidelines Appendix 5.

WINTER SERVICE POLICY 2019/20

2.0 INTRODUCTION

- 2.1 This report presents the Winter Service Policy 2020/21 which remains in a similar format and covers a similar network to the Policy approved by this Committee in previous years, with the exception of a COVID 19 Vehicle Usage Guidelines (Appendix 5). This is generally based on the network and times of the public bus service with additional priority and resources allocated to strategic high speed roads.

3.0 RECOMMENDATIONS

- 3.1 It is recommended that the Committee:-
- Notes the proposals for community resilience
 - Notes weather summary from 2019/20 at Appendix 1
 - Approves the 2020/21 Winter Maintenance Policy at Appendix 2
 - Notes the Advisory signing, routes unsuitable in severe conditions at Appendix 3
 - Approves the Salt Use Reduction and Preservation of Stocks Protocol at Appendix 4.
 - Approves the Use of Vehicles during COVID-19 Guidelines Appendix 5.

4.0 DETAIL

Winter Maintenance Policy 2020/21

- 4.1 The proposed Winter Maintenance Policy for 2020/21, in terms of treatment standards and routes, remains largely unchanged from that approved by the Council in 2011. The number and category of pre-treatment salting routes remains the same including the amendments introduced to cater for the transfer of A83 Kennacraig – Campbeltown to the Trunk Road network in August 2014. No other direct changes to the category or length of routes treated is proposed at this time. The current level of treatments is based largely around the public bus service network.
- 4.2 The advisory signs of alternative routes in severe snow conditions remain similar to the four routes proposed in previous years. Details on sign configuration and locations are contained in Appendix 3 of this report.
- 4.3 Winter stand-by arrangements will commence on Friday 30 October 2020 and will continue until Friday 16 April 2021. There are a total of 31 treatment routes detailed in the policy's operational planning web-based management tool.

- 4.4 The Winter Treatment Fleet for 2020/21 will consist of 17 hired gritters from Econ Ltd. 1 contractor vehicle on Jura, one shared route assisted by 1 contractor in Lochgoilhead and 12 Council vehicles. This provides 31 main frontline vehicles with 2 spare vehicles to cover breakdowns. In addition, there are 2 x 7.5 tonne tipper vehicles which also incorporate 'multispread' units (gritting attachments) and ploughs and a further 4 x 7.5 tonne tippers that can accommodate ploughs giving a total of 6 extra vehicles that can be deployed together with tractors and 'V' ploughs if conditions demand.
- 4.5 The requirement to manage drivers' hours within the delivery of all Council Services directly impacts on the retention of the Council's Operator Licence. Drivers from across the operational teams (grounds, waste, roads) deliver the pre-treatment service, in conjunction with external contractor assistance on the islands of Jura and partly in North Cowal. In extended periods of extreme winter conditions consideration will be given, at an operational level, to prioritising services to ensure that winter treatments can be delivered. This may result, for example, in refuse collections and other services being temporarily suspended in order to prioritise the clearing of ice and snow. Such measures are only likely in prolonged periods of extreme weather.
- 4.6 Steps are being taken to increase the available driver "pool" by utilising other council drivers including grounds and waste disposal operatives. Discussions are ongoing to resource additional resilience being provided by engaging assistance from external contractors on some mainland routes where in-house coverage is limited. In extreme and prolonged weather events and where other priority tasks occur (such as responses to road traffic collisions, collapsed culverts or COVID 19 outbreak etc) resource may need to be allocated based on a risk based priority.
- 4.7 The table below indicates the statistical variations in operational activities over the last five winter seasons. Weather patterns vary with some years experiencing hazards more widespread and in others more concentrated on inland and higher routes. The equivalent Full Fleet runs statistic is used to indicate an approximation to the budget allowance. The application of salt varies between 10gm² and 40gm² depending on a number of factors including road surface temperature, forecast and residual salt. In parallel with these methods, grit and sand are applied in snow conditions. The route with the individual highest number of turn-outs, remains consistently the A819 East Lorn Strategic Route.
- 4.8 Footways and footpaths will only be treated, in periods of lasting hazard, when it is considered by the winter management team that the physical condition of the footways and footpaths makes it necessary and treatments will be effective. Footways and footpaths will usually only be treated during normal working hours. Our staffing levels are such that we generally don't have sufficient labour available to deal with footways and footpaths in parallel with treatments of the carriageway.
- 4.9 In specific locations additional information and diversion signing will be erected to further inform drivers of the hazardous conditions on some routes and advise them of alternative routes where available resources will concentrate on maintaining treatments. There are three roads where signing to indicate specific alternative routes are available. The sign is deployed for these road closures are detailed in Appendix 3.

1. A817 "Haul Rd", Lomond.

Snow gates at A82 and A814 “central” roundabout
Diversion via A818 Arden - A814 Garelochhead

2. C46 Glen Aros / Glenbellart road , Mull Signs
at Aros Bridge and Dervaig Primary School
Diversion via A848Tobermory
3. C9 Glenfinart Road (The Larach) , Cowal
Signs at Whistlefield Hotel and Sligrachan Bus turning head;
Diversion via A880 Cot House
4. C11 Otter Hill road (Bealach an Drain) , Cowal
Signs at Glendaruel A886 and Otter Ferry B8000;
Diversion via A8003 Tighnabruich and Kames.

Appendix 1 to this report provides a summary of the 2019/20 winter conditions.

Winter Season	2015-16	2016-17	2017-18	2018-19	2019-20
Equiv Fleet Runs	58nr	66nr	110nr	62nr	78nr
Salt used tonnes	10,151t	11,457t	22,992t	13,059t	12,280t
Most turned out run	A819 = 107nr	A819 = 99nr	A819 = 162nr	A819 = 109nr	A819 = 139nr

- 4.10 The Council's Winter Maintenance budget was increased by £500k in Financial Year 2019/20 to an operational budget of £2.12M. This provides the capability to deliver the equivalent of approximately 62 full runs over the coming winter season. This is an increase in estimated runs from the previous years' 55 runs, however was lower than the actual 2019/20 figure of 78 runs. The actual cost of winter maintenance is dependent upon the severity of winter conditions and is a financial risk in that the service responds in accordance with set policy to variable weather events which are not predictable, as an example in the financial year 2018/19 the Hire Gritter Supplier went into administration and thanks to strong financial procurement management the council did not suffer any detrimental financial burden, in fact we were able to save over £250k in hire costs.
- 4.11 Overall the financial cost for 2019/20 was £2.165 million against a budget of £2.122 million. If we have a similar number of runs in this coming winter season, the additional budget figure will assist to cover relevant costs and is marginally over the available budget. The actual cost of winter maintenance will be dependent upon the severity of winter conditions and is an ongoing financial risk in that the service responds in accordance with set policy to variable weather events that are not predictable.
- 4.12 The current 2020/21 Gritter Hire Contract with Econ Ltd has cost £515k, which was held by ECON for the second year from 2019/20, however in light of previous older

less reliable fleet, we have continued to ensure this contract delivers vehicles less than 2 year old vehicles which will increase reliability and efficiency.

- 4.13 As of 17 April 2020, the Council held a stock of 7,911 tonnes of salt. Provisional replenishment orders will be called forward from mid-Oct, for 4,000 tonnes. This will top up capacity in storage facilities to the target starting stock of +11,000 tonnes.
- 4.14 The Salt Use Reduction and Preservation of Stocks protocol was introduced in December 2010 in light of severe shipping and material shortages is attached at Appendix 4.
- 4.15 The assessment of school routes subject to pre-treatment before 08:00hrs, as required under Priority 3b of the route hierarchy, in section 4 of the Policy, will be assessed each year after the confirmation of enrolment numbers from the autumn intake. Once the levels of occupancy on school bus routes have been confirmed, amendments will be made as necessary to the pre-treatment route plans and descriptions.

Area Committee and Community Engagement

- 4.16 There is ongoing engagement with Area Committee Members regarding the current policy. At the time of writing this report engagement has taken place with most area committees, feedback will be given to a future meeting of each individual area committee/business day.
- 4.17 As part of the 2019/20 year budget settlement, Council allocated an additional £500k to offset historic overspends. £50k of this funding has been allocated to help improve community resilience during winter conditions. As part of the community resilience proposal, as an initial step we aim to better engage with our local communities and involve them in our winter maintenance programme. Where possible, this will involve empowering communities to work with the Council during winter weather events.
- 4.18 Due to COVID-19 Officers have been delayed in progressing community engagement for winter. As part of the discussions with the Area Committees there have been some suggestions from Members of known community groups who may be interested in participating in a winter response. Officers will be engaging with known groups with a view to having participation and active community engagement and involvement this coming season.

Transport Scotland

- 4.19 Following the decision to trunk the southern section of the A83, Transport Scotland are now roads authority for this section of road. Argyll and Bute Council continue to provide a winter service and reactive emergency repair service on behalf of Transport Scotland via Bear Scotland to the section of trunked A83 between Kennacraig and Campbeltown.

Route Optimisation

- 4.20 Work is underway to specify and procure a route optimisation system. A request for information (RFI) which is a form of soft market testing, has been carried out. The results of which are being used to formulate a detailed specification which will be used as part of the tender process. Route optimisation will be used to ensure that the routes

used in many cyclic activities are efficient and effective. Route optimisation will benefit many service areas including refuse collections, winter routes, gully cleansing, home to school routes, inspection routing etc. One of the benefits of a route optimisation system is that changes can be easily accommodated whether due to changes in demand, availability of vehicles, drivers etc.

- 4.21 Further detail including a project timeline, projected benefits/efficiencies etc will be reported to a future meeting of the ED&I Committee once a programme is available.

5.0 CONCLUSION

- 5.1 This report details the Council's Winter Maintenance Policy for 2020/21 and highlights the pressures on resources and operational effectiveness due to the constraints of future funding levels and best practice advice.
- 5.2 Committee is asked to approve the Winter Service Policy 2020/21 and note the details in appendices 1 – 5.

6.0 IMPLICATIONS

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| 6.1 | Policy | It is considered to be good practice for Committee to confirm policy for winter maintenance activity on an annual basis. This report seeks to achieve the above. |
| 6.2 | Financial | The Council's Winter Maintenance budget was increased to £2.12M in financial year 2019/20. This provides the capability to deliver the equivalent of approximately 62 full runs of the treatment fleet over the season. The actual cost of winter maintenance is dependent upon the severity of winter conditions and is a financial risk in that the service responds to weather events that are not predictable. Should the criteria for school bus routes change this will have a financial effect on the budget. Extra costs associated with COVID-19 to ensure vehicles are properly cleaned as well as if they are off road for 72 hours in the case of contamination will also have an effect on the budget. |
| 6.3 | Legal | The Winter Maintenance Policy sets out the Council's level of service provision for winter maintenance |
| 6.4 | HR | Staffing levels have reduced over recent years, this can make it challenging to have sufficient staff to deal with a severe winter event. Processes are in place for external suppliers to assist in geographic specific locations with additional support being levered in by framework contracts should severe weather persist. |
| 6.5 | Equalities
/Fairer Scotland Duty | None known |
| 6.6 | Risk | The proposed policies are designed to reduce the Councils exposure to risk. |
| 6.7 | Customer Services | The winter service has been designed to maintain access to |

the Councils Strategic Road Network during winter conditions.

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August 2020

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APPENDICES

1. Summary of 2019/20 winter conditions
2. 2020/21 Winter Service Policy
3. Advisory Signing – Road Closures in Severe Conditions.
4. Salt Use Reduction and Preservation of Stocks Protocol (2020 revised)
5. Use of Vehicles during COVID-19 Guidelines

Appendix 1 – Weather Report Summary of conditions 2019-20

Weather Summary Nov 2019 – April 2020

Another winter of fluctuating conditions with short spells of wintry weather interspersed between wet and mild conditions. Sub-zero temperatures affected the whole area on only one or two nights at a time, although these periods extended on higher routes affected by wintry showers. There was an increase in the number of “Named Storms” this year which intensified in the latter half of the season but this also brought an increase in the wintry conditions over more extended periods than earlier months. Another classic “marginal” winter with frequent “wash-off” conditions removing salt from the network and requiring repetitive treatments in advance of the next risk of borderline sub-zero conditions.

Weather forecasts and observations – October - November 2019

The first indication of sub-zero temperatures was a sharp frost on the early morning of Monday 21st October, where Road Surface Temperatures (RSTs) dropped to Minus 1.5 to Minus 1.8 Deg C in central domains, with Minus 2.3 Deg C recorded at A816 Blaran.

This was a temporary dip, with overnight temperatures generally Plus 7 to 10 DegC through until Fri 25th October before forecasts started to indicate marginal conditions in the following week.

RSTs dropped to Minus 3.5 Deg C overnight at A886 Leanach on Mon 28th Oct, with generally clear conditions allowing a further drop to between Minus 4.2 Deg C and Minus 3.1 Deg C on the next three nights through to Thu 31st October, all at A816 Blaran sensor.

The first official week of standby was a mixture of clear skies and spells of rain, with minimum RSTs generally above freezing but with dips in clear periods. Minor dips to Minus 0.5 DegC were recorded in Cowal and on Mull and Islay in this week but it was from the 8th November onwards that the next spell of clear and cold conditions developed.

RSTs down to between Minus 1 and Minus 5.2 DegC recorded over the area on Friday 8th, developed into persisting “all day” sub-zero temperatures as the week progressed. Minus 6.2 DegC on 10th with a risk of hill snow in the forecasts, before a minor improvement as a warm front moved over the area bringing a band of rain, prior to another spell of persistent frost which developed between Wed morning 13th November with RSTs down to Minus 4 DegC each night through to 17th, before an overnight low of Minus 7 DegC was recorded at A816 Blaran on the morning of Mon 18th Nov.

Overnight RSTs continued to fluctuate through to 21st Nov where the next wet and mild spell took over, until Friday 29th. The last two nights of the month saw a return to frosty nights and icy conditions with Minus 6.2 Deg C recorded at A886 Leanach on 29th with a further “season low” so far of Minus 7.9 DegC recorded there the following night.

Weather forecasts and observations – December 2019

The brief cold spell that developed at the end of November, continued into December, with a new “season low RST” so far of Minus 8 DegC recorded at A816 Blaran on Sunday 1st with Minus 5.7 DegC at A886 Leanach Mon 2nd. Overnight temperatures recovered to plus 7 to 9 DegC for the remainder of the first week until strong winds and heavy rain arrived over the weekend Fri 6th – Mon 9th December. This was accompanied by the first “Named Storm Atiyah” of the season, causing widespread wind damage, overtopping of watercourses and flooding to the road network. Skies cleared on Sunday into Monday 9th Dec. allowing marginal RSTs at Lorn E and Cowal sensors, Minus 0.3 to Minus 0.5 DegC. Cloud cover and wind speeds increased during Monday into Tuesday 11th, although the path of “Storm Brendan” passed over Wales and England during this period, with Scotland experiencing heavy thundery showers. Overnight temperatures inland were marginal with a steady drop through to 17th Dec, Minimum RSTs Leanach Minus 2.3 DegC, Accurach Minus 1.8 DegC on 12th, with more wide spread sub-zero RSTs by 16th, Leanach Minus 3.6 DegC through to Dervaig Minus 0.5 Deg C, generally island and urban sensors indicated much milder conditions compared to inland high level areas. After a brief respite on 16th there was another widespread drop overnight 17th – 18th Dec with a further

widespread frost. From 18th onwards, conditions turned more “autumnal” with temperatures dropping to minimum Plus 1 DegC with frequent bands of rain and strong winds. There was a brief return to “winter” conditions on Christmas day with forecasted minimum RSTs for inland domains, in the evening, of marginal Minus 0.2 to 0.4 DegC. However clearances over the north and west of the area later, resulted in observed minimum RSTs of Minus 0.2DegC at Ballygrant - Islay, with A816 Blaran sensor dropping to Minus 1.5 DegC. Conditions became unseasonably mild from Boxing day onwards with overnight minima recorded as Plus 6 to Plus 7 Deg C through to the morning of 30th Dec. The month, year and decade went out on another brief showing of wintery conditions with a forecast for inland areas of Minus 2Deg C from mid-night onwards into 31st Dec. Actual observations indicated longer and deeper extents to the freeze conditions . Minimum RSTs Minus 3.4 DegC , A816 Blaran & Salachray with Minus 2.3 DegC recorded at island sensors Ballygrant – Islay & Cnoc an Rath-Bute., allowing a sharp frost to linger through the morning of 31st Dec. Temperatures improved from mid-morning but dipped again in Eastern and Central domains with early evening minimum RSTs of Minus 2.2 DegC at A817 Haul Road & A819 Accurrach, with Minus 1.7DegC Cnoc an Rath and Minus 1DegC E Argyle St Helensburgh before cloud cover increased and temperatures improved dramatically.

Weather forecasts and observations – January 2020

New Year's Day was a transition between the brief period of frosty conditions that ended December and a series of weather fronts from Thu 2nd January onwards, which brought frequent heavy and persistent periods of rain and strong winds. Gales affected the whole of the area but especially coastal districts through 6th - 8th Jan, with maximum gusts at Dervaig of 68.3mph on 6th and 72.7Mph on 7th with Ballygrant recording 51.7Mph gust also on 7th. Clearances expected on the morning of 9th Jan resulted in a forecast for widespread ice, although observations indicated that after lows on the evening of 8th, with A819 Accurrach Minus 1 DegC, A816 Salachray Minus 0.7DegC, RSTs recovered positive during the early hours of Thu 9th Jan although fluctuated and remained marginal in the North. A clear day on 9th lead to a sharp drop in temperatures overnight into Fri 10th, with Minus 4.4DegC at A886 Leanach, Minus 3.8DegC A816 Blaran & Salachray & Minus 2.8DegC Cnoc an Rath-Bute. Heavy rain and wind returned on 11th but there were localised dips to Minus 1 Deg C overnight into 12th in northern domains, in intermittent cloud cover. The forecast for 13th – 14th January centred on the path of the now second officially named, Storm Brendan, which passed between Scotland and Iceland and brought strong winds and heavy seas to Argyll and Bute during Monday and overnight. Whilst the forecast indicated a risk of freezing rain and sleet, the sub-zero observations were at sites out-with Argyll to the northeast, with just marginal Zero Deg C RSTs indicated in Cowal and Lorn domains on Tuesday morning. Wind gusts in the previous 24hrs to 08:00 Tue 14th at Dervaig Mull had fluctuated between 60 – 65 Mph consistently with a maximum gust of 90.4Mph at 19:40hrs, with Stewarton –Kintyre and Ballygrant - Islay recording 58 – 59 Mph gusts between 13:00 -14:00hrs on Mon 13th, resulting in heavy storm surges affecting mainly south and east facing coastal roads and properties, more so in inner Clyde areas rather than the western coasts, with the A83 Trunk Road at Ardrishaig, Lochgilphead and Inveraray all affected by wave action. Conditions remained variable throughout the week to Fri 17th, with marginal sub-zero RSTs recorded in short duration and isolated to mainland northern sensors. Clearer conditions with a High Pressure area moving over Britain on Sat 18th allowed overnight temperatures to drop to Minus 3.4 Deg C at Leanach to Minus 0.3 Deg C Helensburgh , with Island domains marginal but positive. A deeper drop occurred overnight into Sun 19th, with all rural and urban sensors sub-zero, Minus 4.9 Salachray, Minus 4.7 Blaran, through to Minus 1.3 Deg C at Dervaig – Mull. Cloud increased from the west on Sunday, with overnight Surface temperatures no lower than Plus 1.9 to Plus 5.6 Deg C. The pattern of mild, westerly airflows with weather fronts of heavy and frequent showers or longer spells of rain, which have been a feature of this winter, continued throughout the week to Sunday 26th. Genrally overnight temperatures were no lower than Plus 4

to 5 Deg C. Wintry showers affected mainly the North East of the area on Monday 27th. In most cases this was a combination of wet snow / sleet with limited lasting hazards, however a pulse of dry hail affected Oban town, Mull and North Lorn around 07:00hrs giving localised accumulations of 50mm, with recurring showers throughout the day. More widespread wet snow and hail/sleet affected the whole Council area overnight and into Tue 28th with typical overnight minimum RSTs of Minus 2 to 4 Deg C. This was replaced generally by a thaw by Tuesday evening with heavy rain causing localised flooding as heavy rain and snow-melt combined to overtop watercourses and roadside ditches. The month ended with mild air and rain on 29th - 31st.

Weather forecasts and observations – February 2020

The season pattern of isolated short duration cold spells continued into February. Rain on Saturday 1st with an overnight low of Plus 5.5 C at A886 Leanach, gave way to a clearance on the morning of Sunday 2nd in the north and east with overnight minimum RSTs of Minus 0.1C at A819 Accurrach, Minus 0.9C A816 Blaran, Minus 0.7C Dervaig Mull and Minus 0.3C at A817 Haul Rd –Lomond, other sites to the south were marginally positive. This pattern repeated on 3rd into 4th with marginal RSTs. and isolated clearances. Lower temperatures overnight 6th – 7th resulted in observations of Minus 2.4DegC Accurrach -E.Lorn, Minus 1.3C Blaran - W Lorn and Leanach - Cowal, with marginal temperatures in southern and island domains in variable cloud cover around dawn, leading to light frosts on untreated surfaces. A fine clear day on Friday 7th gave way to cloud moving West-East as the approaching weather fronts culminating in Named Storm Ciara covered the area 8th – 10th Feb. Maximum wind gust of 90.1mph was recorded at Dervaig at 12:00hrs on 9th Feb.

The following week brought a mixture of wet and windy conditions with precipitation falling as snow, sleet or hail on higher level routes overnight. Minimum RSTs dropped through the week, Minus 2.8Deg C at Accurrach on Mon 10th down to Minus 6.6 Deg C at Leanach in clearer conditions by Tue 12th, with Minus 3.3C as a minimum, at both stations 13th – 14th.

The next Named Storm Dennis, crossed the Atlantic during this period and the low pressure took a track through the Iceland Gap, north of Shetland. The strongest winds and rain fall, attached to the southern arm of this storm, passed over England, with Argyll and Bute relatively free from severe hazards. Coastal damage due to strong winds and high tides affected mainly the Clyde Estuary coasts and Kintyre. Some river flooding on 15th - 16th caused localised disruptions and short term road closures but generally the worst of the conditions were much farther south. A maximum gust of 80.8mph, again at Dervaig-Mull was recorded at 13:40hrs on Sat 16th Feb. there then followed another week of mixed weather conditions with isolated heavy showers, including wintry conditions to low level at times, in generally Westerly air flows and progressive weather fronts. Overnight minimum RSTs fluctuated but were generally marginal no lower than Minus 1C, although A816 Blaran dropped to Minus 1.8C in showers around dawn on Wed 19th Feb. Low pressure and high winds again affected the area over the weekend 22nd/23rd, with gusts to 75.6mph at Dervaig but also 68.5mph at the low level site at Stewarton-Kintyre 15:00hrs on Sat 22nd. The pattern of variable conditions continued into the last week of February, with hail, sleet and snow showers throughout the week affecting mainly high level routes but to sea level at times. The intermittent nature of the wintry showers interspersed with rain and clear spells overnight causing RSTs to fluctuate, resulted in recurring hazards. During the week the sensor at A886 Leanach – Cowal was consistently the lowest RST, falling to Minus 1.8 DegC on 24th, Minus 2.6C in 25th and a monthly low of Minus 7.2C in clear air overnight into 26th, recovering in mixed conditions with both Accurrach and Leanach at Minus 3.7C on 27th. The next Named Storm – Jorge approached from the Southwest on Friday 28th and passed over the Western Isles and Northern Scotland on Saturday 29th Feb. Maximum Wind Gusts were recorded at Dervaig-Mull 47.2mph at 02:40hrs Fri 28th, 57.3mph at 01:00hrs on Sat 29th at the low lying sensor at Stewarton – Kintyre and 50.3mph at Ballygrant –Islay at 22:40hrs on the Sat 29th Feb, as the trailing edge of Storm Jorge moved across the country and then out into the North Sea.

Weather forecasts and observations – March 2020

Sunday 1st March saw the aftermath of Named Storm “Jorge”, centred over the Northern Isles. High winds were still a feature in the follow-on fronts with Dervag – Mull recording a gust of 64.4 mph at 10:20hrs on Sun 1st and 55.5 mph at 20:20hrs on Mon 2nd. Cold air continued to affect the region, with minimum RSTs of marginal Minus 0.7 Deg C at Leanach on 3rd, with a more widespread drop on 4th to between Minus 0.3 C at Stewarton to Minus 2.6C Salachray, with urban sites marginally positive. Temperatures fluctuated through this first week with sub-zero RSTs mainly affecting mainland central and northern domains only, with Minus 2.2C at Accurrach on 6th and Minus 1.6C at Blaran on 7th. The following 5 days were affected by strong winds, heavy showers and more persistent rain. A maximum gust of 62mph recorded at Dervag 07:20hrs on 11th, this was followed by a clearance that allowed RSTs to drop between Minus 1.7C Leanach and Minus 2.6C Accurrach into 12th and again towards dawn on 13th a more widespread freeze, between Minus 1 to 1.5C in Urban areas and Minus 1.7C Stewarton to Minus 4.4C Leanach. Again weather fronts gave variable conditions with wind and rain giving way to another clearance overnight 15th to 16th, with minimum RSTs of Minus 0.4C Accurrach to Minus 2.8C at Salachray. This was again followed by heavy rain and a maximum gust of 59.1 mph at Dervag. Marginal conditions with RSTs variable through to the evening of 19th, where a further widespread freeze resulted in RSTs of Minus 1C at Mull sensors to Minus 4.0C in Lorn and Minus 4.6C Cowal

The remainder of this week again saw fluctuating temperatures in intermittent cloud cover with rain and wind. The week commencing 23rd March (first full week of Covid-19 travel restrictions) continued with a largely stationary weather front over Scotland which initially gave heavy and persistent rain before gradually moved South East, allowing clearer conditions to move in from the North West of the area from Thu 26th. Milder conditions prevailed during this period RSTs generally Plus 3 to 5 Deg C but with localised dips in intermittent clear conditions with minimum RSTs Plus 0.4 C overnight. Cloud cover remained over most of the area through Friday 27th, resulting in marginal sub-zero RSTs in northern domains of Minus 0.7 C at Blaran to Minus 1.2C Leanach on Saturday morning 28th March. An area of high pressure centred in the Atlantic northwest of Ireland, gave rise to northerly air flows, with a general clearance allowed RSTs to fall to between Minus 1 Deg C at Cnoc an Rath – Bute and Minus 3.5 C at A816 Blaran by dawn on Sunday 29th. Generally during this time any showers were farther to the East as Argyll was initially in the Grampian Mountain rain shadow, however localised cloud did generate minor shower activity. Marginal forecast conditions overnight 29th to 30th and again into 31st did not develop into any hazards and the month ended with mild air and rain over the whole area as the next weather front moved in from the North Sea around the High pressure area.

Weather forecasts and observations – April 2020

The mild air conditions at the end of March with frequent showers, became marginal on Thu 2nd / Fri 3rd April, with forecasts indicating marginal sub-zero RSTs in selected Northern and Central domains, with the risk of light snow fall. The risk did not materialise as widely as forecast, however A819-Accurrach sensor did dip to Minus 1.2Deg C, with A886-Leanach down to Minus 0.7Deg C briefly, before dawn. Other areas were marginal A816-Salachray Plus 0.1Deg C and A817 Haul Rd-Lomond and Dervag-Mull showing the wide coverage of marginal conditions, both at Plus 0.3Deg C. For the next week, temperatures overnight fluctuated from between Plus 5 to Plus 3 DegC in cloud cover and rain, with dips to Plus 1 or slightly lower in clearer spells. From 10th April, temperatures rose to Plus 10 DegC. as the overnight minimum in some domains. Reaching no lower than Plus 10.4 DegC at Blaran on the morning of 11th, the overnight minimum being Plus 8.7 DegC at Dervag Mull. . The overnight temperatures dropped gradually through to 13th, where a brief period of cold weather resulted in minimum RSTs of Minus 1 DegC at Accurrach with other sub-zero observations at Blaran , Leanach and Dervag-Mull, with Salachray at zero DegC on the Morning of 13th , with other mainland domains remaining positive at Plus 1.1 Deg C or above. This cold snap did not last, with the following 24 hr minimum

recorded as marginal Plus 0.1 – 0.3 at Salachray and Blaran. The remainder of the period up to the planned end of winter standby on 17th was one of mild conditions with minimum RSTs generally Plus 2 to Plus 3 Deg C. A brief cold period on the morning of 18th saw RSTs drop to Plus 1 Deg C but with no hazards forming in the generally dry conditions. As the month progressed, sunny periods increase as warm air from the south was held over the country due to high pressure centred north of UK. No further pre-treatable hazards were recorded in April.



WINTER SERVICE POLICY 2020-21

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1. INTRODUCTION

- 1.1 Argyll & Bute Council has a statutory obligation, under Section 34 of the Roads (Scotland) Act 1984, to "...take such steps as it considers reasonable to, prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads" in the Council area, which by definition includes carriageways, footways, footpaths, pedestrian precincts, etc.
- 12 Argyll and Bute Council will consider implementation of the recommendations included in the UK Roads Liaison Group document - Well Managed Highways Infrastructure, code of practice (first published October 2016) within the practicalities of resources and geography. The Council, through its officers, will liaise and take guidance from the Society of Chief Officers of Transportation in Scotland (SCOTS), Winter Service Subgroup on the consistent approach to implementation, in the context of the Geographical and Climatic conditions relevant to Scotland.
- 13 It is the aim of Argyll & Bute Council to provide a service with respect to the above that will:-
- a) Ensure the provision of a standard of treatment appropriate to the prevailing weather conditions.
 - b) Establish patterns of working which will produce the greatest benefit from the deployed resources, with the view to reducing the level of risk and the extent of any delays to the public, caused by adverse weather conditions.
 - c) At all times comply with the requirements of the Health & Safety at Work Act 1974.

2. OUTLINE PRINCIPLES

The Council, through the Executive Director of Development and Infrastructure Services, will:-

- a) Set policy and strategy and monitor the winter maintenance service.
- b) Arrange weather forecasts to assist the Winter Management team to determine the daily winter maintenance treatment strategy.
- c) Provide specialist winter maintenance plant. e.g. snow plough attachments, bulk gritters, demountable gritters, towed gritters and loading shovels.
- d) Provide salt, grit, grit bins, snow gates and signing.
- e) Provide organise and manage a trained labour force.
- f) Provide non specialist plant e.g. lorries for demountable gritters, pickups, non-specialist loading equipment, hand tools, tarpaulins and the like.

- g) Provide suitable cleaning equipment for staff to sanitise their vehicles prior to and after use, as per the Working Safely in Argyll and Bute Council's Vehicles Guidance (Appendix 5).

3. MANAGEMENT ARRANGEMENTS

- 3.1 The Executive Director of Development and Infrastructure Services is responsible for implementing the Council's Winter Service Policy.
- 3.2 The Head of Roads and Infrastructure Services has overall responsibility for ensuring that the Council's winter maintenance activities are carried out in line with the Council's Winter Service Policy.
- 3.3 The Operations Manager is responsible for the day to day operation of the Council's winter service policy. He is responsible to the Head of Roads and Infrastructure Services for the appointment of a Weather Service Provider (forecaster), collection of winter management and weather data, maintaining salt stocks, winter plant and communications, training of staff, preparation of rotas for on-call Managers and Area Supervisors.
- 3.4 The Operations Manager in consultation with the Network and Standards Manager shall appoint appropriate staff as Winter Managers. The Winter Manager on duty is responsible for consulting with the Duty Manager and approving the draft winter plan of action together with any subsequent updates to that plan produced by the on-call Duty Manager.
- 3.5 Duty Managers are responsible for analysing forecast data, liaising with the forecast provider and producing the daily winter maintenance action plan and gaining approval from the Winter Manager. They will ensure that the daily winter maintenance action plan is submitted to local areas for action by 15:00 hrs each day. They will monitor the weather information and make any changes to the action plan as conditions require.
- 3.6 The Operations Manager will ensure that the appointed staff in their areas are aware of and understand the strategies and priorities as stipulated. On receiving the Duty Manager's approved daily winter action plan they will ensure, through the Area Winter Supervisor, that the plan is correctly implemented. They will ensure, wherever practicable, that adequate resources are available to fully undertake the Council's Winter Service Policy.
- 3.7 Discussions will take place between Senior Management to monitor performance, at regular meetings. Any problems highlighted by the Duty Managers will be resolved at local level, where possible. Duty Managers will be relieved by other Area Office staff, from any local management responsibilities, during their weekly duty requirements.
- 3.8 Provision of the Winter Service on Council roads will normally run from the nearest Friday to the 1st November through to 15th April each season. However, this period may be extended, at either end, to accommodate prevailing weather conditions.
- 3.9 Daily communication will take place with the Trunk Roads Service provider to inform each other of their respective treatment proposals. The Council work in partnership

with the Trunk Road Operation Company and provide the winter and emergency response service for A83 Trunk Road, Campbeltown to Kennacraig section. Treatment instruction for this road is received as part of the daily TR plan and actions are recorded on the TR gritlog form and transmitted to their control room on completion.

4.0 POLICY ON TREATMENT PRIORITIES

4.1 Carriageway treatment

4.1.2 Prior to the commencement of each winter the Assistant Network and Standards Manager will produce carriageway gritting routes based generally on the following principles:-

Priority 1 Strategic high speed, main traffic routes				
Lomond - A814 Dumbarton- Garelochhead, A818 Arden (A82) - Helensburgh Cowal - A815 Cairndow – Dunoon Ferry Lorn / Mid-Argyll - A816 Oban - Lochgilphead, A819 Dalmally – Inveraray				
	04:00 – 08:00hrs	08:00 – 16:00 hrs	16:00 – 22:00 hrs	22:00 – 04:00 hrs
Mon - Sat	Pre-treat as required + reactive	Pre-treat as required + reactive	Pre-treat as required + reactive	Reactive as reported conditions dictate
Sun & PH	Pre-treat as required + reactive	Pre-treat as required + reactive	Pre-treat as required + reactive	Reactive as reported conditions dictate

Priority 2 Other “A” and “B” classified roads, Except where treatment is categorized under Priority 3 bus routes, or less.				
A814 Garelochhead –Arrochar, A815 Dunoon-Toward, A817 Haul Road & B833 Rosneath Peninsula, A880 to Ardentinnny, A885 Sandbank, A886 Strachur– Colintraive, A8003 Tighnabruaich, A844 / A845 & A886 on Bute, A846 / A847 on Islay, A846 on Jura, A848 / A849, A884 & B8073 Tobermory – Dervaig, on Mull, B828 / B839 to Lochgoilhead , B842 Southend –Carradale, B843 to Machrihanish, B844 / B8003 to Easdale & Cuan, B8024 Kilberry Loop , B841 / B8025 Achnamara & Tayvallich. Plus Principal Accident and Emergency routes or roads to hospitals and routes to Police stations, Fire stations and Ambulance depot accesses Other selected streets in main urban areas e.g. steep hills, etc where route efficiency permits.				
	06:00 – 08:00hrs	08:00 – 16:00 hrs	16:00 – 22:00 hrs	22:00 – 0600 hrs
Mon -Sat	Pre-treat as required + reactive	Pre-treat in advance (if possible) + reactive	Reactive as reported conditions dictate	Reactive - only in extreme conditions
Sun & PH	Pre-treat as required + reactive	Pre-treat in advance (if possible) + reactive	Reactive as reported conditions dictate	Reactive - only in extreme conditions

Priority 3 Any section of public road, outwith P1 & P2 above, subject to :- Main Public Service bus routes as timetables require that can be met within operational time bands. Should it be impractical to cover a service then the operator must be notified or Main School Bus routes prior to or during term days only.					
New designation		06:00 – 08:00hr	08:00 – 16:00 hrs	16:00 – 22:00 hrs	22:00 – 0600 hrs
Priority 3	Mon-Fri	Pre-treat as required	Pre-treat in advance (if	No treatment unless stable	No Treatment

Service Route		+ reactive	possible) + reactive	conditions forecast a.m.	
	W/E	Pre treat in advance of journey, if possible, but no guarantee. Timetabled days only.			
Priority 3 School Route (12 or more occupied seats)	Mon- Fri	Pre-treat as required + reactive	Pre-treat in advance + reactive	No treatment unless stable conditions forecast a.m. (Not Friday p.m.)	No Treatment
	No treatments out-with School Term days (apart from Sunday evenings in advance, if stable conditions forecast Monday a.m.)				

Priority 4 All other public roads, Only as actual conditions dictate and resources are deemed to be effective.				
	06:00 – 08:00hr	08:00 – 16:00 hrs	16:00 – 22:00 hrs	22:00 – 0600 hrs
Mon - Fri	No treatment	Reactive (may include pre-treat)	Reactive – only in extreme conditions	No treatment
W/E & PH	No treatment	Reactive – only in extreme conditions	No treatment	No treatment

4.1.3 The above route priorities are set around the requirements to pre-treat in advance of freezing conditions or react to developed hazards within a reasonably practicable timescale within the confines of the resources available. Under standard conditions, pre-treatment routes are designed to be completed within 3 hours of mobilisation.

4.1.4 Where hazards re-occur after treatment or in conditions where instantaneous hazards occur, resources may be required to concentrate on re-application of several treatments prior to moving on. In such circumstances the highest priority routes, experiencing such conditions, will generally be treated first and resources will only be released to other priorities once it is determined that treatments have an expectation of remaining effective.

4.2 Footway and Footpath Priorities

421 At the start of each winter, the Assistant Network and Standards Manager will produce footway and footpath treatment routes based generally on the following principle.

Priority 1 - Urban Shopping Areas and Precincts

Priority 2 - Other areas of high pedestrian concentration, e.g. in the vicinity of hospitals and schools.

Priority 3 - Steep hills in housing developments and in the vicinity of residential homes for the elderly.

422 Footways and footpaths will only be treated, in periods of lasting hazards, when the Duty Manager, in consultation with Area staff, considers that their physical condition makes it necessary and treatments will be effective. They will usually only be treated during normal working hours.

4.3 Resources

4.3.1 Labour

To ensure that an adequate labour resource is available to allow treatment to be carried out, arrangements are in place with Amenity Services section to participate in the supply of additional labour when conditions require.

4.3.2 Plant

Plant to assist with the clearance of snow and spreading of salt has been provided by Roads and Infrastructure Services. Attachments to mowers to allow footpath ploughing will be fitted at the start of each season, where practicable. Footway salt spreading barrows are provided for use by available labour when required.

4.4 Cycleways

- 4.4.1 Only cycleways contiguous with roads and footways will be treated in conjunction with any planned treatments.

5. WINTER STANDBY, STANDBY PROCEDURES AND GRITTING GUIDELINES

- 5.1 The formal winter standby period for Council roads will normally be from the end of the working day on the Friday nearest to 1st November to the Friday nearest to 15th April. This period may be extended at either end as the prevailing weather conditions dictate.

5.2 Shift and Standby Procedures.

- 5.2.1 During the operational period, standby arrangements will be operated on a formal home standby basis, with call-out as required. Arrangements will be put in place to allow mobilisation of any frontline vehicle within 1 hour of call out.
- 5.2.2 Standby rotas will include sufficient drivers to ensure that the priority 1 routes can be treated within 3 hours of commencing treatment
- 5.2.3 On receipt of a weather forecast indicating medium to heavy snow, sufficient additional operatives will be placed on standby to cover all priority 1 & 2 routes and any priority 3 routes likely to be affected as timetables indicate, by the forecast.

5.3 Carriageway Treatment

- 5.3.1 Carriageways will generally be treated in the order of priority as specified in section 4.
- 5.3.2 By 13:00 each day during the winter months, having considered the most recent weather forecast, the level of residual salt on the road

Network and the available resources, the Duty Manager will compile an Action Plan for carriageway treatment for the following twenty-four hours. The Winter Manager will review, recommend any adjustments if needed and then approve the proposed plan.

- 533 Precautionary treatment for frost and light snow will be spread at a target rate of 10g/m² of salt.
- 534 Precautionary treatment for conditions where frost is forecast after rain should be delayed as long as possible to reduce loss of salt due to wash-off. This should not preclude the treatment of routes during showers where freezing of rain on contact has been predicted, or is reported.
- 535 Precautionary treatment when heavy snow falls are expected should be at a rate of between 20 and 40g/m² of salt according to the anticipated severity of snowfall and confidence level of the forecast.
- 536 In conditions where current snowfall is forecast to continue, substitution of salt with abrasive materials, sand or grit, will be instigated until such time as showers cease and any use of de-icing materials are deemed to be more effective. In extreme or persisting conditions, all material spreading will cease until there is an expectation that any deposits will remain on the carriageway and be effective in aiding traction.
- 537 In marginal conditions, consideration will be given to limiting treatment to known localised areas prone to icing. During periods of prolonged freezing conditions in the absence of precipitation, spot salting of areas of persistent seepage will continue while hazards remain.
- 538 Where areas of seepage from adjoining land are recorded on a regular basis, these will be identified and pre-emptive rectification of the drainage system will be instigated.
Land owners will be notified of their requirement to carry-out such work as it affects public roads. The Council will take necessary steps to effect repairs, in the absence of any undertaken by landowners and pursue recovery of costs accordingly.

54 Footway and Footpath Treatment

- 541 Treatment of footways and footpaths will be by a combination of mechanical and manual operation. In large urban areas footway salting will be carried out by purpose built spreader barrows with a nominal design spread rate of 50g/sq.m.
- 542 Salt will only be utilised where ice and frost are the main hazard. In all snowfall conditions, physical clearance will be the priority with sand / grit spread thereafter to aid traction.

- 5.4.3 Treatment of footways and footpaths will normally only be carried out during the normal working day as resources permit. In most cases additional resources should be mobilised at local level as conditions dictate. The Winter Manager and Duty Manager will be kept informed of all additional resources mobilised by local management.

6. SNOW CLEARANCE STRATEGY

6.1 Carriageways

- 6.1.1 On receipt of a weather forecast indicating medium to heavy snow, carriageways should be treated in accordance with section 5.3.5. When the forecast is for rain turning to snow or the snow prediction is marginal the salting operations should be delayed accordingly.
- 6.1.2 When forecasts indicate that there will be medium or heavy snow falls, the Duty Manager will instruct that all vehicles capable of being fitted with ploughing devices will be so equipped.
- 6.1.3 Salting should be continued or be restarted when snow is falling, as conditions warrant however sand / grit must be used to preserve de-icing materials until such time as it can be used effectively.
- 6.1.4 Snow ploughing will commence as soon as it is considered that the operation will be effective. Generally snow can only be ploughed effectively at depths exceeding 30mm.
- 6.1.5 Spreading treatment of ploughed surfaces will be carried out when it is considered that the material will have the most beneficial effect. The normal case on two lane carriageways will be for spreading treatment to be started when the second lane is being ploughed, generally in the return direction. However in persisting snow conditions the spreading of materials shall be delayed until clearance of accumulations is effective.
- 6.1.6 Resources should generally be allocated to clear roads in the order of priority shown in section 4, but with precedence being given to those areas which have experienced the heaviest snow falls and drifting
- 6.1.7 Where slush is formed it should be ploughed as soon as practicable to avoid the risk of rutting should there be a further significant drop in temperature which might result in freezing conditions.
- 6.1.8 Where snow hazards are predicted to persist or develop intermittently throughout the night, consideration will be given to continuing action in some circumstances. Mainly in cases where a break in operations may result in hard packed snow or other conditions difficult to treat on resumption.

- 6.1.9 Individual circumstances, such as access for emergency services or other lifeline service vehicles will normally take precedent over the above route priority arrangements.
- 6.1.10 Where it is judged that a road cannot be kept open, early closure in liaison with the Police in a planned manner, should be initiated. Direct consultation at local level must be maintained where conditions are changeable and in some circumstances this may mean discussions on site between local Supervisors and Police officers.
- 6.1.11 In specific locations additional information and diversion signing will be erected to further inform drivers of the hazardous conditions on some routes and advise them of alternative routes where available resources will concentrate on maintaining treatments. There are three roads where signing to indicate specific alternative routes are available.
1. A817 "Haul Rd" , Lomond.
Snow gates at A82 and A814 "central" roundabout
Diversion via A818 Arden - A814 Garelochhead
 2. C46 Glen Aros / Glenbellart road , Mull
Signs at Aros Bridge and Dervaig Primary School
Diversion via A848 Tobermory
 3. C9 Glenfinart Road (The Larach) , Cowal
Signs at Whistlefield Hotel and Sligrachan Bus turning head;
Diversion via A880 Cot House
 4. C11 Otter Hill road (Bealach an Drain) , Cowal
Signs at Glendaruel A886 and Otter Ferry B8000;
Diversion via A8003 Tighnabruaich and Kames.
- 6.1.12 Road closures will be reported to the Director, Head of Service, Operations and Network Standards Managers as soon as practicable, with immediate notification transmitted to Traffic Scotland and local radio stations where appropriate.

62 Footways and Footpaths

- 621 Where footways and footpaths are covered with light accumulations of snow i.e. less than 30mm, treatment will consist of the application of Sand or Grit as described in section 5.4. of this document.
- 622 Where snow depths exceed 30mm footways clearance will be carried out where practicable by pedestrian operated or ride on powered footway ploughs. This will be enhanced by manual clearance when necessary i.e. where access precludes the use of the above plant.
- 623 Snow clearance of footways will normally only be carried out during the normal working day and as resources permit.

7. ASSISTANCE FROM EXTERNAL CONTRACTORS

- 7.1 Roads and Infrastructure Services provide labour and non-specialist plant as specified. In some districts, mainly islands, resources are limited and private contractors are used to provide cover to comply with this policy.
- 7.2 In areas of the network remote from the main depots, sub-contractors are engaged to provide the full winter service provision in parallel with the in house council resources.
- 7.3 In severe weather conditions additional resources can be drafted in from local private contractors to supplement those of the Council. Arrangements are made through the Operations Manager to contact these contractors in advance to determine their availability and formulate contingency plans for contact and mobilisation. The Winter Manager and Duty Manager will be kept informed of all additional resources mobilised by local management.

8. SALT ETC.

8.1 Provision of Salt

- 8.1.1 Salt or other de-icing materials will be supplied through the Network and Standards Manager. An annual supply contract shall be let prior to the start of the winter season.
- 8.1.2 Onsite sampling and testing shall be carried out in each area as the Network and Standards Manager deems necessary. The Network and Standards Manager will ensure that sufficient stocks of Salt and Abrasive materials are maintained at each storage location.

8.2 Storage of Salt

- 8.2.1 Where practicable salt shall be stored under cover to prevent leaching, improve handling and to reduce treatment times. A programme of upgrading salt stores with permanent roofs will be undertaken as quickly as practicable and as financial, planning and operational considerations allow.
- 8.2.2 Storage facilities will be loaded out prior to the commencement of operations and stock levels will be monitored weekly to assure optimum supplies are available throughout the season. Stores will be kept as full as practicable as protection from the weather allows and minimum stock levels will dictate optimum re-ordering procedures.
- 8.2.3 Weekly totals of all salt quantities delivered, transferred or issued as treatments will be collated for each storage location and e-mailed to HQ for central collation from 12:00hrs each Friday.
- 8.2.4 Requests for additional salt will be included in these weekly e-mails and calling forward of orders will be co-ordinated centrally through the Roads

Procurement Officer, with the supply contractor to provide the most efficient means of optimising stock levels.

83 Use of Salt and Salt / Abrasive Mixtures

- 83.1 Preservation of salt or other de-icing materials for use where they are most effective should be a consideration when formulating a treatment plan. Service resilience must be taken into consideration at all times.
- 83.2 All routes will be pre-treated with pure rock salt, as the most effective method of preventing freezing of wet surfaces or melting of previously formed ice. However on predominantly rural routes affected by snow, grit may be added at 1:1 salt/grit mix to aid traction and break up compacted layers. In severe conditions or when supplies are restricted, pure Sand / Grit will be employed to preserve de-icing stocks.
In wholly urban areas, salt only should be applied to the carriageway at all times. Salt should be spread at the designated spread rates as determined by the Duty Manager.
- 83.3 The grading of salt and grit for mixtures shall be such that 100% will pass a 6.3mm sieve but less than 1% passing a 2mm sieve.
- 83.4 Grit bins should be filled with a 3:1 grit/salt mix, initially at the start of the season. Continued replenishment in times of persisting hazard will be purely of Sand / Grit to preserve de-icing materials and only when resources permit.
- 83.5 Provision of Salt to other departments of the Council or other Contractors will be restricted to maintain the resilience of the Roads and Footways Winter Service within the terms of the Salt preservation Protocol.

84 Calibration and control of Salt Rates of Spread

- 84.1 The Operations Manager will ensure, through the Fleet Manager that all spreaders, permanent and demountable, are maintained in such a manner as to optimise the salt feed and regular checks of the calibration shall be carried out. Records of all tests and alterations to the calibration shall be maintained for inspection.
- 84.2 All spreaders shall have limiting devices fitted such that spread rates cannot exceed 60g/m². The device may be fitted in such a manner as to allow it to be temporarily disconnected to assist the clearance of blockages.

85 Grit Bins and Grit Heaps

- 85.1 Grit heaps and grit bins are normally placed on routes not included on the Priority 1 – 3 pre-treatment network, or on sections of these routes where additional self help facilities are considered advantageous. They are provided to allow the public to use the salt/grit mix to treat localised hazards on carriageways and footways on the public adopted network.

- 852 Grit heaps will be situated on rural road verges predominantly on bends, junctions or steep sections. They shall be placed at distances which provide a reasonable volume of material over the extent of any problem area as, if material has to be carried too far, it is unlikely to be used. Consideration will be given to the environmental impact associated with tree roots, hedges and watercourses.
- 853 Grit Bins will normally be situated in urban areas or where leaching from grit heaps in rural areas is likely to have an environmental impact. They are placed similarly to rural grit heaps to provide an additional self help facility in streets such as at bends, junctions, steep sections of carriageway or footway or close to schools and other public buildings where delays in planned treatments may result in persisting hazards. Care must be taken in locating bins to avoid impeding sight impaired pedestrians or access to public utilities or roads authority apparatus. Generally where practicable, grit bin sites will allow material to be carried downhill to treat sections of the public network
- 854 Replenishment of material to grit heaps or bins will be carried out as regularly as conditions of use require, within the confines of available resources. Sites in regular use may require more frequent visits and the mix of material may vary as operational resources and stocks of available materials permit. This may depend on the overall salt resilience capability of the Council in times of prolonged severe weather conditions.
- 855 Requests for the locating of additional grit heaps or grit bins in urban areas will be considered using the following criteria.
- Is the request relevant to the Council asset of adopted roads and footway network?
 - Is there a genuine need for an additional facility, based on local knowledge, the type of hazard of concern and any accident history? The criteria for locations in 8.5.2 & 3 above will apply.
 - The proximity of similar facilities will be considered, as provision of bins and heaps often leads to further requests in similar locations.
 - The overall volume of bins and heaps will have an impact on the ability to provide an effective replenishment operation.
- 856 A register of grit bins shall be maintained by the Network and Standards Manager and their location and suitability will be reviewed annually. Grit bins will be serviced and all debris and litter removed prior to the start of the winter season. Initial replenishment of heaps and bins will be carried out prior to the start of the formal standby period, where practicable.

9. PLANT RESOURCES AND SERVICING PRACTICES

- 9.1 All winter maintenance plant will be serviced, overhauled and made ready for use, at least two weeks before the designated start of the winter period. All servicing and maintenance of specialist winter maintenance plant will be the responsibility of

the Operations Manager. The Council's Fleet Services section, maintain all plant and equipment for the user departments. The Fleet Manager will inform the Operations Manager of any deterioration in the effectiveness of any items of Winter Maintenance Plant.

- 92 Any short fall in resources caused by the removal of plant from service, during the winter period, should be reported to the Operations Manager by the Duty Supervisor. The Operations Manager will then seek ways to address the problem. Where additional fleet vehicles are available, these will be prepared as back-up units, either in advance of operations or as soon as practicable whenever a shortfall in vehicles arises.
- 93 The Operations Manager will ensure that all major items of plant are made operational by the start of the standby period. A programme of trial runs will be drawn up, to allow all items of plant to be tested and have all their accessories fitted to ensure readiness for the winter period. The trial runs will be carried out on a depot by depot basis during normal working hours.

10. WEATHER FORECASTING AND MONITORING

- 10.1 DTN Group , Antwerp, (formerly MeteoGroup, London) have been contracted to provide the road forecast for the period 1st October to 15th May each winter period. Access to forecast information will be gained via the local area networks at Council offices during office hours, or by a broadband router link from Duty Manager's homes. Information is available on a bespoke website for weather information and partially backed up by e-mail. In the event of a system failure it will be possible to obtain the forecast information by fax to the Duty Manager's Office or verbally out of hours to their home.
- 102 The contract with DTN Group provides for a twenty-four hours consultancy arrangement. Forecasters are available throughout the winter period by telephone, to discuss weather matters and clarify details with department staff.
- 103 The text forecast is augmented by other services as necessary, including the use of RADAR and satellite images to study precipitation patterns. There are fourteen Road Sensor stations, owned by the Council and maintained by DTN Group's partner Vaisala Ltd, giving atmospheric and surface conditions, situated throughout the Argyll and Bute road network.

11. OPERATIONAL COMMUNICATIONS

- 11.1 Vehicle / Duty Supervisor / Depot Communications
- 11.1.1 Winter maintenance vehicles are provided with a cellular telephone, such that contact may be maintained with the Duty Supervisor or depot at all times. When it is considered safe to do so, manning of vehicles fitted with effective communications facilities, will be limited to the driver only.
- 11.1.2 The fleet of 31nr frontline, route specifically allocated and 2nr back-up, winter maintenance vehicles are fitted with satellite tracking and data-

logging equipment, provided by Trackyou Ltd. Vehicles can be monitored through web access, in real time during operations and their actions are recorded and archived for future reference. One other private contractor owned vehicle is employed on pre-treatment operations on the Isle of Jura where in-house resources are limited.

- 11.13 Throughout the period of winter standby, the Operations Manager will ensure that staff are available to receive calls from the Police and other appropriate agencies. Call out rotas will be provided to the Operations Manager, adjacent authorities, management agents and the Police.

112 Communications with Police Scotland, Roads Policing Section

- 1121 It is important that the strong partnership, formed with the Police, is maintained. Information relating to severe weather conditions will be communicated to the Police at the earliest possible opportunity. The Duty Manager will consult fully with the Police when it becomes necessary to arrange road closures and when there is a need to move abandoned vehicles.
- 1122 The “out of hours” emergency rota will be issued to the Police by the Operations Manager. This will be confirmed to the Police Area Control Room at Helen Street, Glasgow on the Friday start to each weekly duty shift.
- 1123 The Duty Manager will arrange for the daily action plan to be e-mailed to the four main local Police offices each day. This will also include a confirmation of the Area Supervisors’ and Duty Manager’s out of hours contact telephone numbers.
- 1124 The Duty Manager will take due regard of all reports received from the Police, concerning dangerous road conditions and give consideration to them, in line with the Council Policy, in deciding the action to be taken.

113 Communications with other Agencies and Motoring Organisations

- 1131 BEAR Scotland, the North West Trunk Roads term contract operator will be sent the daily action plan and out of hours contact information, each day throughout the winter period.
- 1132 The Duty Manager will inform Glasgow City Council ; Roads and Lighting Faults Call Centre , R.A.L.F. , of the out of hours contact numbers for the following weeks shift and any amendments necessary thereafter. Contacts with Scottish Fire and Rescue and Scottish Ambulance Service, control rooms are included in this transmittal process.
- 1133 The Winter Manager will inform Traffic Scotland when severe weather conditions are causing delays to traffic movement.

114 Communications with the Public

- 11.4.1 The Winter Manager will post details of the 24hour winter treatment plan each day no later than 1400hrs on the winter maintenance page of the council website.
 - 11.4.2 Enquiries from the public will normally be dealt with by the Customer Access Centre during normal working hours.
 - 11.4.3 Consideration will be given to the placing of warning signs, alerting drivers to the possibility that road surface hazards may develop outwith treatment times will be placed at the interface of Priority 1 to Priority 2 & 3 routes
 - 11.4.4 Leaflets explaining the extent of treatment routes, their priority and hours of operation will be prepared and where necessary updated, in advance of each season. These will be distributed by electronic means or to all local area Council premises and other public access buildings and establishments, such as filling stations and shops. Further copies may be issued as mail-drops or inserts to local newspapers.
 - 11.4.5 The Winter manager will ensure that any disruption to the network is reported through the internal service disruption noticeboard on the council website.
- 11.5 Media
- 11.5.1 National radio, television and national press enquiries should be dealt with by the Director or the Head of Service or through the Council's Press and Media Relations Office.
 - 11.5.2 Local radio and press should be dealt with by the Head of Service or by the Operations and Network and Standards Manager.
 - 11.5.3 The Head of Service, Operations or Network and Standards Manager will be advised as soon as practicable if conditions deteriorate such that major routes have to be closed.

12. INSTRUCTION AND RECORD KEEPING.

- 121 The management of the Instruction, Recording and Archiving of daily winter Action plans is automated, by use of a bespoke winter maintenance management tool provided by Vaisala Ltd.
- 122 Vaisala – Road DSS Manager is the web based system which allows access by managers and supervisors simultaneously, to post instructions and record actual activities on each specific pre-treatment route as operations progress. Details will include some or all of the following:-
- a) Details of the routes treated.
 - b) The start and completion of treatment on a specific route.
 - c) Type of treatment carried out.
 - d) Driver and other operator details
 - e) Quantity of materials used
 - f) The prevailing weather conditions.
 - g) Any contacts by Police regarding reactive requirements
 - h) Details of any plant breakdowns, accidents or incidents.
 - i) Any other problems
- 123 In parallel to the above recording system, vehicle activities are recorded on the “Trackyou” - vehicle tracking system. Reports and map based graphical records can be run to confirm and clarify in more detail, the recorded activities.
- 124 All records are archived in separate remote servers and can be retrieved through web access by any authorised user, at any time after a plan has been completed.
- 125 Additional records of all telephone calls related to winter operations are kept by all duty supervisors and managers. These are completed at the end of each shift, collated and filed centrally for future reference.

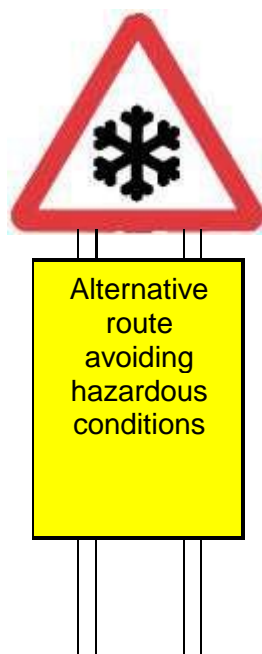
End – Winter Policy Document

Appendix 3 – Advisory signing, routes unsuitable in severe conditions

In specific locations additional information and diversion signing will be erected to further inform drivers of the hazardous conditions on some routes and advise them of alternative routes where available resources will concentrate on maintaining treatments. There are three roads where signing to indicate specific alternative routes are available.

5. A817 "Haul Rd" , Lomond.
Snow gates at A82 and A814 "central" roundabout
Diversion via A818 Arden - A814 Garelochhead
6. C46 Glen Aros / Glenbellart road , Mull
Signs at Aros Bridge and Dervaig Primary School
Diversion via A848Tobermory
7. C9 Glenfinart Road (The Larach) , Cowal
Signs at Whistlefield Hotel and Sligrachan Bus turning head;
Diversion via A880 Cot House
8. C11 Otter Hill road (Bealach an Drain) , Cowal
Signs at Glendaruel A886 and Otter Ferry B8000;
Diversion via A8003 Tighnabruich and Kames.

Example of typical information sign



Sign on permanent display during Winter Season.

Road Closure in conjunction with temporary signs when conditions dictate.



APPENDIX 4 Salt Use Reduction and Preservation of Stocks Protocol.

Argyll and Bute Council WINTER SERVICE – OPERATIONS 2020/21

Protocols for the reduction in use of salt and preservation of remaining stocks.

Storage Capacity, Stock Transfers and replenishment times

Storage capacity in all 15 “Operational” salt stores has been increased by 3,500tonnes to approximately 14,000tonnes, since 2009, through phase 1 of the covered tunnel construction programme. The 3,000tonne plus capacity Dome in Helensburgh, although an operational store, has an element of strategic storage.

For national salt resilience purposes, daily usage is calculated on 2 Priority WRC1-3 network treatments and one WRC4 “other routes” treatment in each 24hr period.

This equates to 375tonnes/day at normal use levels, 600tonnes/day for heavy snow.

The West of Scotland Co-ordination Group, Roads sub-group agreed that Roads Authorities should achieve a minimum storage capacity of equivalent to 70% of the average total salt usage of the last three severe winters. This equates to a minimum 11,650tonnes for Argyll and Bute.

However the target tonnage for the start of each season, 1st November may vary, as replenishment of some stores are related to shipping capacity and availability, however a minimum 11,000tonnes is considered reasonable. This equates to 28 continuous days supply at Winter Policy treatment levels.

As the national salt supply contract has an allowance of 21days to fulfil delivery from point of order, the minimum resilience required in normal conditions equates to four weeks operations or approximately 60% of the new capacity, at 10,000tonnes. In practice, reduced quantities of 6,000tonnes before replenishment are acceptable. This equates to a resilience of 16 days operations, at normal treatment levels.

Within this total quantity, material may require to be moved between stores to preserve a degree of individual resilience in each of the operational stockpiles around the network. Internal transfers between stores ensure adequate stocks are available as much as practicable to maintain a consistent treatment regime throughout the network. In this way the hierarchy of route treatments can be preserved as per the policy, for as long as practicable within any delivery shortage period.

Operational Decision techniques to Manage Salt use.

Winter Service Policy already recognises the need to preserve salt primarily for the prevention or treatment of ice on higher speed carriageways. 3Grit:1Salt mixes are already utilised in Grit Heaps and Bins and in the reactive treatment of footways.

Salt preservation techniques can be instigated on carriageway treatments where forecasts or conditions indicate that a mixture of salt and grit will provide the best treatment to aid traction. The winter operations decision to use 50/50 mixes should only be for this purpose, rather than to preserve supplies. In periods of falling snow, Grit only should be used on “return” ploughing legs until such time as snowfall ceases and there is an expectation that salt will melt any residual snow after ploughing.

In settled constant dry conditions Residual Salt levels on carriageways allow the curtailment of further treatments, as part of the daily operational plan.

Reduction in Salt use in treatments, to preserve remaining stocks.

Where salt stock levels reduce and replenishment activities are doubtful in either quantity or timescale, the use of salt will be curtailed under the following procedures.

Salt Preservation level

Circumstances

Authorised by.

SP1 Total Operational Stocks reduce to 6,000tonnes Winter Manager

This level will be reached in conditions of reasonably prolonged hazardous conditions or where extreme conditions reduce the effectiveness of salt. The supply chain for salt replenishment may become of national importance and Transport Scotland and West of Scotland Co-Ordination Group advice may be received.

First Operation:- Activate replenishment from Strategic Stockpile at Helensburgh Dome

Depending on the likely delay in replenishment, part of the Strategic stockpile may be moved to other operational stores. The quantity will be determined by the potential delivery date for shipping, to replenish the Helensburgh store from King George 5th Dock Glasgow and other western stockpiles, via Argyll ports. The transfer of each 1,000 tonnes of stock will provide a further 4 days resilience within the operational stores, at normal use rates.

Resilience:- 4 - 12days at normal use levels 375t/day : 2 - 6 days heavy snow 600t/day

Second Operation:- Activate Salt Preservation Measures.

Salt treatments will be reduced. Spread rates adjusted from 40g/m² to 20g/m², or 20g/m² to 10g/m². Further reductions in the salt content of all carriageway treatments will be achieved by mixing Grit and Salt together, firstly at 1Grit:1Salt then 2Grit:1Salt.

In extreme frosts where RSTs remain below -5C all day, and salt is considered to be ineffective, additional treatments of pure Grit on all routes can be instructed to aid traction. Grit heaps, bins and footway treatments will remain at 3grit:1Salt.

Resilience:- 32days at reduced use SP1 = 188t/day : 20days heavy snow

SP2 Total stocks reduce to 4,000tonnes

Head of Service

Salting treatments will be curtailed to Priority 1&2 pre-treatment routes only (1205 km)

The SP1 salt mixing techniques will be used in all further SP levels.

All other treatments will be of pure Grit including replenishment of grit bins / heaps.

Resilience:- 25 days at reduced use SP2 = 156t/day : 15 days heavy snow

SP3 Total Stocks reduce to 2,000tonnes

Executive Director

Salting will be reduced to one treatment per 24hr forecast period, of the Priority 1&2 network, usually 06:00hrs mornings, in advance of the majority of traffic movements.

All other treatments will be of pure Grit including replenishment of grit bins / heaps

Resilience:- 25 days at reduced use SP3 = 78t/day : 15 days heavy snow

SP4 Total stocks reduce to 1,000tonnes

Chief Executive

Salting reduced to Priority 1 and Priority 2 "A" class routes only 06:00hrs. (492km)

All other roads and mobilisation times, Grit only.

Resilience:- 32 days at reduced use SP4 = 31t/day : 20 days heavy snow

SP5 Total Stocks reduce to 700 tonnes

Chief Executive

Effectively **2 days resilience at original policy normal use.** The trigger point for application to Scottish Executive Emergency Salt stockpile. Release of salt, allowing replenishment out with the normal constraints of the national salt supply contract.

Resilience:- 22 days at reduced use SP5 = 31t/day : 13 days heavy snow

Total resilience: SP1 (2nd Op) > SP5 (end) = 68 days : 41 days heavy snow.

APPENDIX 5: Working Safely in Argyll and Bute Vehicles Guidelines

Scope

This guidance has been produced to assist Argyll and Bute Employees to understand and apply the principles and practices which will reduce the risk of coronavirus disease when using Argyll and Bute Council vehicles.

Introduction

This document is based on the HM Government paper *Working safely during COVID-19 in or from a vehicle*¹.

This document is one of a set of documents about how to work safely in different types of workplaces. This one is designed to be relevant for people who work from vehicles and should be read in conjunction with the Argyll and Bute Cleaning Guide (Appendix 2) and the Driver's Daily Vehicle Check Record Document (Appendix 3).

How to use this guidance

This document does not supersede any legal obligations relating to health and safety, employment or equalities. It contains non-statutory guidance to take into account when complying with these existing obligations. When considering how to apply this guidance, Argyll and Bute Council has taken into account all employees.

Appendix 1 lists the Argyll and Bute Driving at Work risk assessment link. This risk assessment has been done in consultation with the Trade Unions.

Underlying Principles

The Novel Coronavirus SARS-CoV-2, which causes the disease COVID-19, is spread by 2 principal routes:

- Close contact with a person shedding virus particles leading to droplet inhalation.
- Touching surfaces contaminated with virus particles and subsequently transferring those viruses to the eyes, nose or mouth.

A close contact can be defined as someone living in the same household, someone who had direct or physical contact with an infected person, or someone who has remained within two metres of the infected person for longer than 15 minutes. People who have simply passed an infected person in the street or in an enclosed place are at very low risk.

Managing Risk

Objective:

To reduce risk to the lowest reasonably practicable level by taking preventative measures.

¹ <https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19/vehicles> (accessed 16/06/2020)

- It will not always be possible to keep a distance of 2m inside vehicles. Many in-vehicle tasks need more than one person, for example heavy deliveries or refuse collection, and changing vehicle configurations to create more space may not be practical.
- Where the social distancing guidelines cannot be followed in full in relation to a particular activity, if that activity needs to continue for the business to operate, managers must ensure they take all the mitigating actions possible to reduce the risk of transmission between their staff. Mitigating actions include:
 - Further increasing the frequency of hand washing and surface cleaning.
 - Keeping the activity time involved as short as possible.
 - Using screens or barriers to separate people from each other where appropriate.
 - Using back-to-back or side-to-side working (rather than face- to-face) whenever possible.
 - Reducing the number of people each person has contact with by using 'fixed teams or partnering' (so each person works with only a few others).
 - Social distancing applies to all parts of a business, not just the vehicle, but also depots or breakrooms and anywhere drivers congregate outside of the vehicle. These are often the most challenging areas to maintain social distancing

Social distancing within vehicles

Objective

To maintain social distancing wherever possible between individuals when in vehicles.

- Avoid multiple occupancy vehicles where safe to do so.
- Vehicles should not be shared if possible.
- If it is not possible to keep a 2m distance in a vehicle, consider additional safety measures.

Steps which will usually be needed:

Devising mitigation measures where workers have no alternative but to work within 2m to minimise the risk of transmission, including:

- Clear signage to outline social distancing measures in place.
- Single person or contactless refuelling where possible.
- Using physical screening, provided this does not compromise safety, for example, through reducing visibility.
- Sitting side-by-side not face-to-face and increasing ventilation where possible.
- Using a fixed pairing system if people have to working close proximity, for example in a vehicle.
- Making sure vehicles are well-ventilated to increase the flow of air, for example, by opening a window.
- Ensure regular cleaning of vehicles, in particular, between different users.

Monitor, check, review and learn

Proactive:

Daily checks

Drivers are responsible for carrying out and having recorded daily cleaning and checks as well as weekly checks as follows:

- Daily checks – As per Appendix 3
- Daily Cleaning – This MUST be done at the start and end of any journey or use of vehicle and plant - As per Appendix 2

In respect of the Pool and Fleet vehicles, the Fleet section will be responsible for obtaining the cleaning kit, however all other vehicles will be the responsibility of individual services/departments.

Appendix 1: Argyll and Bute Council Driving at Work Risk Assessment

Check below link for the most up to date Form:

[Driving at Work Risk Assessment](#)

Appendix 2: Argyll and Bute Council vehicle cleaning guide

Instruction:

Drivers are responsible for Disinfecting / Cleaning Daily, Prior to Use and Before any Vehicle or plant is Parked up / Returned at end of Day / Use.

YOU WILL NEED:



Process:

1. Wash your hands and put on your gloves



2. Before entering the cab, spray the door handle and then dry it



+



3. Open the door to spray and dry grab handles and any other contact points



+



4. keep windows open to allow airflow



5. Spray and clean all hard surfaces a bit at a time inside the cab



+



Please also remember to clean the hand brake and gear stick if appropriate.

5. When exiting the cab, clean interior door handle, door panel and grab rails



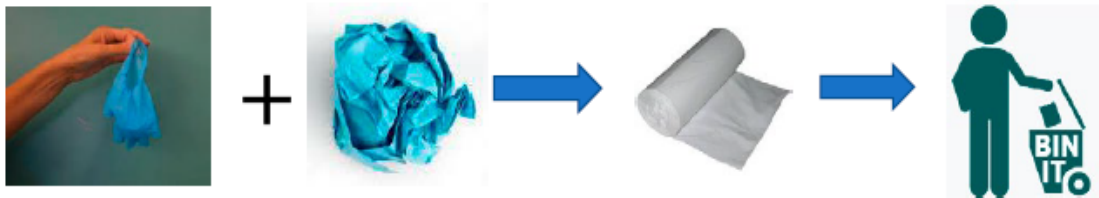
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6. Close the windows & lock the vehicle



7. Dispose of the cleaning towels and gloves in the disposal bag provided and place in available waste container



8. Wash your hands



HPS Guidance states “Only to hold onto waste for 72 hours where there has been a suspected case of CV19.

If no case is suspected then dispose as normal.