



ROADS & TRANSPORTATION SERVICES

WINTER GRITTING & SNOW CLEARING SERVICES



Policy Statement 2018/19

Policy approved by Environment, Enterprise & Transportation Committee on 11/09/18

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INTRODUCTION

An effective roads winter gritting and snow clearing service is important to the delivery of normal services, the local economy and road safety within Fife. Bad weather and road conditions can lead to delays and hazards for all road users. Winter gritting and snow clearing involves treating roads in order to: -

- prevent ice from forming (pre-salting)
- melt ice and snow (post-salting)
- remove snow (ploughing)

Fife Council has a statutory responsibility, under 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”*. It has been legally established that it is unreasonable to expect every road and footpath to be treated at the same time. In addition a transient danger for a short time (as a result of snow) is no evidence of a breach of duty.

Decisions on whether or not to act must be taken with due care and on reasonable grounds. The object is to provide a winter gritting and snow clearing service which as far as is reasonably practical, within financial constraints and resource limitations, will:

- permit the safe movement of vehicles and pedestrians on the more important parts of the network
- seek to minimise delays and accidents attributable to weather conditions
- take cognisance of the environmental impact of the salting process

The **Winter Gritting and Snow Clearing Policy Statement** provide a clear basis for an efficient and effective **Winter Gritting & Snow Clearing Operational Plan** which defines the means by which the required standards are to be achieved.

Each previous winter performance will be assessed to inform an annual review of the Policy Statement with any policy changes reflected in the updated Assets, Transportation and Environment Winter Gritting & Snow Clearing Operational Plan. Annual reviews include updates of all relevant operational information for the coming winter season e.g. resource levels, salt tonnages etc. with any Policy changes subject to approval via the Council committee structure with recent amendments detailed in table below.

Date of Approval	Reason for Amendment	Council Committee/Group
September 2011	Policy changes following review of severe winter	Environment, Enterprise & Transportation Committee
October 2014	Changes to treatment arrangements in line with national/industry guidance	Enterprise & Transportation Policy Working Group
November 2017	Update on Operational Review re delivery of Winter Gritting & Snow Clearing service	Economy, Tourism, Transportation & Strategic Planning Committee
May 2018	Priorities and Treatments Standards (Section 3.0) updated	Economy, Tourism, Transportation & Strategic Planning Committee

To reflect the importance of winter maintenance policies and standards to the local economy and the travelling public the Winter Gritting and Snow Clearing Services Policy Statement will be widely disseminated and made available to the public on the fife direct web site.

1.0: ARRANGEMENTS FOR SERVICE PROVISION

1.1 Operating Period

The winter operating period will run from October until April each year.

The “core” period for 24hr continual monitoring will run from the end of October until the end of March with footway and cycleway operations beginning at the end of November until mid-February, the exact starting and completion dates to be established pre winter season.

1.2 Service Provision

During this period Assets, Transportation & Environment, as principal service provider, will provide the necessary resources (including suitably trained personnel) in order to achieve the required standards. These resources are located at the three Operational Transportation Depots at Cupar (North Fife), Bankhead, Glenrothes (Mid Fife) and Dunfermline (South Fife) where salt is stored for the treatment of 24 primary routes, secondary carriageway all other routes, footways, car parks and cycleways. **Appendix A** details the resources in place to deliver the winter service. Appropriate arrangements will be made to ensure a continuity of service during the festive season and other holiday periods.

Assets, Transportation & Environment will annually price a Schedule of Rates which identifies the required level of personnel, equipment and material resources to meet the defined standards of service. This schedule will establish the basis of payment for works carried out, assist in ensuring best value in winter maintenance service provision and facilitate (via the billing process) the effective monitoring of expenditure against available budgets.

During the winter period, Assets, Transportation & Environment will operate a 24 hour winter service, using weather forecasts, road and weather monitoring data supplied through competitive tender.

On a rota basis, one staff duty officer will provide 24 hour cover for all winter related issues and decision making. Although this is a “singular” role the duty officer will comprise the following “component” roles.

Role	Period of Duty
Winter Manager	On duty 24 hours
Nightshift Officer	23:00hrs – 08:00hrs for all shifts

The primary focus of Assets, Transportation & Environment is to manage the overall winter service and to directly provide an effective roads gritting & snow clearing service. To deliver this service, operatives’ standby arrangements will be made which are suitable and sufficient to meet the defined standards of service required. It is expected that standby personnel will be at their base, fit for work, within 30 minutes of receiving a call.

The standby period for operatives will normally be consistent with the “core” winter period as defined in Section 1.1 above. Nightshift working and road patrols may also be authorised during certain periods of the winter.

A footway gritting and snow clearing service is provided by Parks, Streets & Open Spaces (PSOS) engaged by means of an agreed Service Level Agreement to work under the direction of the Winter Manager. A standby service for winter footway action on public holidays and weekends is in place as per Service Level Agreement.

When severe weather conditions prevent normal outdoor activities such as grass cutting, grounds maintenance, streets sweeping, litter picking and various building related work, such available resources are allocated to winter services to support the treatment of snowbound footways, minor roads and the filling of grit bins. Such additional employees from Building & Environmental Services (i.e. PSOS, Waste Operations and Building Services) are allocated to the most appropriate Roads & Transportation Services depot to assist in the delivery of a prioritised winter service under the direction of the Winter Manager. The agreed resources to be provided by these Services are also detailed in **Appendix A**.

1.3 Sub-contractors

In exceptional circumstances, such as heavy snow and drifting, external contractors and other resources, such as JCB's, diggers, tractor ploughs etc. may also be engaged from the existing tenders already in place.

1.4 Salt Supply / Resilience / Storage

Salt is purchased each year to restore stocks to a level sufficient to meet the anticipated requirements for treating the road network and these stocks are closely monitored and controlled with restocking ordered throughout the winter to maintain agreed stock targets.

6mm rock salt is the prime material used as it is considerably cheaper than marine salt; its finer grading reduces the potential for damage claims and bounce on the road surface and reacts quicker on the road surface.

Salt will be purchased by competitive tender and the current vehicle for this is the Scotland Excel Salt Supply Tender.

Bulk salt will, when stocks permit, be supplied to Education Service for use with mini tractors in school snow and ice clearance. In addition, small one-off supplies of salt may be available on request, and on a strictly rechargeable basis, to the Emergency Services and other internal Fife Council customers only.

Salt will be tested on delivery by independent testing laboratories for compliance with the determined quality standards

Salt is stored at the three operational depots of Cupar, Bankhead and Dunfermline. Both Cupar and Bankhead facilities provide indoor salt barn storage with outdoor storage at Milesmark.

It is well documented that the prediction arising from climate change is that although weather is likely to be warmer, when cold weather occurs, it likely to be more severe and for prolonged periods. This is also likely to be UK wide with significant demands placed on the UK salt suppliers to keep up with supply demands. As shown by the national salt crises in 2008/09, 2009/10 and 2010/11 the UK salt production industry cannot meet the demands of a countrywide period of severe winter

weather. For this reason just in time salt stock management systems do not provide sufficient resilience.

The days of resilience are determined by each Council depending on re-stock arrangements e.g. Fife by sea, available depot storage space and capability of salt industry to supply in severe weather. As shown in **Appendix B** the minimum stock level during the winter period is determined at 24,000 tonnes.

On the basis of salt usage 2008/09 to 2017/18, Fife will determine the salt holding at the commencement of the winter to a level that guarantees resilience against the national standards. However following the increased covered storage facility at Bankhead and the resulting reduced salt treatment rates that salt in this optimum condition can deliver, the pre-winter stock will be 24,000 tonnes. This stock holding will be held at the three operational depots as follows:

- Cupar Trading Estate Covered – 3,595, tonnes
- Bankhead, Glenrothes Covered – 16,380 tonnes
- Milesmark – 4,025 tonnes

1.5 Roads – Salting

▪ **Salt:**

Salt for use on the roads will be to the requirements of BS 3247 and will be 6mm rock salt, although in times of national shortages this may be supplemented with other de-icing materials e.g. 6mm marine salt, 10mm rock salt etc.

Salt will be purchased by competitive tender and the current vehicle for this is the Scotland Excel Salt Supply Tender.

Bulk salt will, when stocks permit, be supplied to Education for use with mini tractors in school snow and ice clearance.

Salt will be tested on delivery by independent testing laboratories for compliance with the required quality standards

▪ **Salt Spread Rates:**

Research has recently been undertaken by the Transport Research Laboratory (TRL) on behalf of the Highways Agency and the National Winter Service Research Group (NWSRG) into the potential for reducing salt spread rates. The findings were that spread rates can be reduced considerably in marginal conditions when salt is in good condition and is being spread by well maintained and / or modern spreaders that are properly calibrated.

The most recent NWSRG “Practical Guide for Winter Service” has been developed based on this research and backed up by the practical experience of high performing service providers who have added their expertise and peer reviewed the work by TRL. Therefore users can have confidence that the advice provided and incorporated in the best practice guidance note is sound from both theoretical and practical point of view.

The 'Well Maintained Highways' document of September 2013 makes recommendations on treatment levels with due consideration to road surface temperature, wetness and traffic levels.

The Society for Chief Officers in Transport for Scotland (SCOTS) has reviewed the most recent 'Well Maintained Highways' document and made recommendations that are appropriate for Scottish Local Authority networks using experience and knowledge of typical conditions experience on these networks.

SCOTS has further developed and agreed a treatment matrix table for given road and weather conditions and this criterion will be used by Fife Council Winter Managers and Officers in determining winter action plans and treatments. This treatment matrix is included in **Appendix C**.

▪ **Salt Conservation Procedures:**

Salt resilience levels have been determined to cope with a severe winter. However in the event that the weather pattern has been so extreme and combined with a national salt crisis that has impacted on Fife's salt stock levels, the following good practice guidelines for salt conservation will be applied:

- Reduce salt spread rates as appropriate
- Restrict Salt Spreading Service to Primary Routes
- Move to using salt/grit mixes on non-Primary Routes
- Replenish Grit Bins and Heaps with Grit only
- Review Priorities for Footway and Cycleway Treatment

2.0: INFORMATION FOR ACTION

2.1 Weather Forecasting Information

A weather forecast information service will be procured for the duration of the winter period. Competitive quotations will be sought from competent service providers for compliance with a defined specification which includes: -

- a preliminary text forecast received not later than 0800hrs on any given day
- a detailed 24hr forecast, received not later than 1300hrs on any given day
- a site specific graphical road surface and ice prediction forecast (for Bogside, Kelty, Corston & Guardbridge) received not later than 1300hrs on any given day
- a 2-5 day summary forecast
- amendments and updates to original forecast information where any changes may affect planned actions
- a 24hr consultancy service

The weather forecast provider is procured through a competitive tender in collaboration with the Edinburgh, Lothians, Borders and Fife (ELBF) Group.

2.2 Road Weather Information System (RWIS)

A road weather information system is installed in Fife to provide remote monitoring of local road surface and climatic conditions. The system supplies data to the weather forecasting service and receives weather forecast predictions therefrom. The system comprises the following components: -

- 4 weather stations with sensors providing air and road surface temperatures, dew point, precipitation, wind speed and direction monitoring.
- 6 standard outstations with sensors providing air and road surface temperatures and dew point monitoring.
- A centrally managed bureau system incorporating data retrieval, archive and dissemination.
- Web access for receipt of forecast information and outstation data.
- Additional road temperature data is gathered from sensors fitted to Supervisors vehicles during patrol only assessments.

2.3 Decision Making

The detailed forecast information for the upcoming 24 hour period is received by 1300hrs on any given day and is accessed by Assets, Transportation & Environments' Winter Manager.

The Winter Manager examines the forecast information in conjunction with local knowledge of road conditions, weather conditions and trends, altitude effects, cold spots and residual salt presence in order to develop a proposed action plan.

A consistent Fife-wide action plan is prepared, with any minor variations across areas restricted to exceptional circumstances. Consultation may be undertaken with neighbouring authorities and Trunk Road Operators to ensure cross-boundary consistency.

The Winter Manager will issue the agreed proposed action plan for all of Fife (normally by 1500hrs) in order that the appropriate preparatory arrangements may be made.

Confirmation of the forecast and proposed action is posted on Fife Direct with relevant stakeholders and partners (e.g. Fife Emergency Services, Fife Council Services, Elected Members, Emergency Planning Unit etc.) informed directly via email.

Ongoing monitoring of the Road Weather Information System undertaken as conditions dictate in addition to a 24 hour, 7 day monitoring regime which is in effect during the "core" period identified in Section 1.1.

Each morning (by 0730hrs) information regarding all actions taken in the previous 24 hour period is collated and made available via Fife Direct with relevant stakeholders and partners updated as above.

2.4 Levels of Readiness

Three levels of readiness are applied throughout the Winter period –

1	‘Routine’ monitoring and action conditions apply. Sub-zero temperatures forecast over no more than 4 consecutive days requiring daily standard action of 10 or 20g/m ² pre-grits on Primary Routes. Only staff and workforce whose normal duties include Winter action, monitoring and supervision are involved.
2	As Level 1 plus extended monitoring and action conditions apply. Prolonged freezing conditions forecast for 5-10 consecutive days and/or snowfall is forecast. Additional staff allocated duties to handle extended monitoring and reporting systems etc. with operational workforce participation be extended as appropriate. Partner Services will be notified for assistance/awareness as required e.g. Emergency Resilience, Building & Environmental Services (i.e. PSOS, Waste Operations and Building Services), Emergency Services etc., State of readiness checked regarding plant, equipment, external contractors, inspect and replenish grit bins where appropriate.
3	As Level 2 plus full monitoring and action conditions apply. Severe and continued snowfall endangering the continuity of the infrastructure, internal central control room established and full reporting systems in place. Full participation from Service staff in Corporate Incident Management arrangements and protocols.

It is the responsibility of the Winter Manager to implement the necessary level of readiness in relation to ground conditions and forecast information. A detailed escalation procedure is outlined within Assets, Transportation & Environments’ Winter Gritting & Snow Clearing Operational Plan.

Further details of how readiness links to forecasts and weather alerts is included in table below: -

Forecast Condition		Level of Readiness	Risk Level	Met Office Weather Warnings
	Road surface temperatures forecast to be +1°C or above and road surface hazards (ice and/or snow and/or hoar frost) are not expected to occur.	1	Low	N/A
	Road surface temperatures forecast to be below +2°C and there is uncertainty regarding road surface hazards (ice and/or snow and/or hoar frost).		Moderate	Yellow
	Road surface temperatures forecast to fall below zero and road surface hazards (ice and/or snow and/or hoar frost) are expected to occur.		Substantial	Yellow/Amber
		2	Severe	Amber/Red
		3	Critical	Red

SECTION 3.0: PRIORITIES AND TREATMENT STANDARDS

3.1 Carriageways – Priorities

Fife Council's carriageway network is prioritised for treatment in accordance with the table below:

Classification	Description	Details	No. of Routes	Network coverage
Primary	Priority 1 routes	<ul style="list-style-type: none"> ▪ Designated Strategic and Traffic sensitive routes including all A and B Roads ▪ Registered bus routes including school bus routes (excluding weekends, in-service days and holidays) ▪ Access to hospitals, ambulance stations and fire stations. ▪ Access to main transport hubs e.g. bus stations, railway stations. ▪ Access to important industrial and military establishments. ▪ Known trouble spots. 	24	59%
Secondary	Priority 2 routes	<ul style="list-style-type: none"> ▪ Important commuter routes ▪ Access to isolated villages and hamlets. ▪ Areas of high amenity use e.g. Public buildings, Health Centres and Schools 	16	26%
All Other	Priority 3 routes	<ul style="list-style-type: none"> ▪ All areas of network not covered by Primary or Secondary Routes. 	N/A	15%
Snow	Minimum Winter Network	<ul style="list-style-type: none"> ▪ Enacted in severe weather conditions. ▪ Consolidation of Primary Routes. ▪ Critical arterial routes to enable movement of key supplies and services. 	12	37%
<p>Notes:</p> <p>1. Motorways and trunk routes, as defined by the Scottish Government within the boundary of Fife (A985, A977, A92, and M90) are the responsibility of Transport Scotland and their appointed Operating Company(s).</p>				

Treatments are undertaken on a route basis with routes subject to continual review to reflect changes in bus routes, road classifications etc. and optimised to maximise operational efficiencies etc.

Prior to each winter season routes will be made available for public viewing.

3.2 Carriageways – Treatment Standards

Primary Routes:

Primary Routes are given a 24 hour/7 day service for the clearance/treatment of snow and ice formations. Treatments are provided over the core winter period i.e. from the Friday nearest to the beginning of November to the last Friday in March.

Treatments are determined by forecast information and it is expected that all Primary Routes will be treated within 3 hours of operations starting.

School bus routes within Primary Routes will not be treated at weekends, in-service days or on holidays. Treatment will recommence at midday on the day prior to returning i.e. 12:00 hrs Sunday for a return on a Monday.

Secondary Routes

Treatment of Secondary Routes will only be considered in periods of Level 2 readiness i.e. when prolonged freezing conditions, 5-10 consecutive days or snowfall is forecast

Treatment will not take place out with the normal working weekday (Mon to Fri 07:30hrs - 16:00hrs) and will only take place when Primary routes have been adequately attended to and subject to available resources.

Where conditions are such that a continuous treatment of Primary Routes is necessary, then Secondary Routes, subject to available resources, will be treated concurrently with Primary Routes.

It is the intention that Secondary Routes should not remain unpassable to vehicular traffic for more than 48 hours.

All Other Routes:

All Other Routes will normally be treated once Primary and Secondary Routes have been adequately attended to.

These routes are generally most effectively treated on a geographical basis as there may be little differential between individual routes, particularly in urban conurbations.

Where conditions are such that a continuous treatment of Primary Routes is necessary to allow free movement of traffic then, subject to available resources, consideration will be given to treating All Other Routes concurrently with Primary and Secondary Routes.

Snow Routes:

Snow Routes are identified to allow a concentration of available resources to ensure essential communication links are maintained. Treatment of Primary routes will resume once all Snow Routes have been adequately attended to and subject to available resources.

3.3 Footways – Priorities

Fife Council’s footway network is prioritised for treatment in accordance with the table below: -

Classification	Description	Details	No. of Routes	Network coverage
Primary	Priority 1 routes	<ul style="list-style-type: none"> ▪ Main pedestrian routes linking transport interchanges i.e. railway/bus stations ▪ Areas of high pedestrian footfall including access to : - <ul style="list-style-type: none"> ~ Main urban shopping areas ~ Hospitals, crematoria and clinics ~ Key designated routes to schools ~ Council owned sheltered housing, residential homes and day care centres for the elderly. 	N/A	46%
Secondary	Priority 2 routes	<ul style="list-style-type: none"> ▪ Main pedestrian routes in major urban housing developments ▪ Busy urban areas including : - <ul style="list-style-type: none"> ~ Significant Public Buildings ~ Minor shopping areas and other commercial areas not included in Primary Routes 	N/A	50%
All Other	Priority 3 routes	<ul style="list-style-type: none"> ▪ Rural and less used urban footways 	N/A	4%
<p>Notes:</p> <p>1. No treatment will be undertaken out with adopted footway boundaries.</p>				

Treatments are undertaken of a route basis with routes subject to continual review to reflect changes in footway network, Fife Council estate, retail & commercial developments etc. and optimised to maximise operational efficiencies etc.

Prior to each winter season routes will be made available for public viewing.

3.4 Footways – Treatment Standards

Fife has over 2200km of footway and given the financial and resource limitations it is not possible to treat all footways simultaneously. Subsequently it is important that the priorities identified in Section 3.3 are strictly adhered to.

The treatment of footways will be confined to the removal of snow deposits. In exceptional circumstances e.g. where thick and persistent frost exists (24-48 hours) and is expected to continue, salting treatment may be undertaken on footways where resources permit. Where such treatment is provided it will be undertaken in priority order consistent with details included in Section 3.3.

For maximum effectiveness and network coverage within available resources, the standard approach to carriageways with two footways will be to clear one footway only (within any priority level) before moving on to lower priorities.

▪ **Priority 1 Footways**

The treatment of Priority 1 Footways will not take place out with the normal working weekday (Mon to Fri 07:30hrs - 16:00hrs) other than in exceptional circumstances where: -

- ~ widespread snow conditions exist, or
- ~ where thick and persistent frost exists (24-48 hours) and is expected to continue,

Standby crews will be provided for Priority 1 Footways from the Friday nearest the beginning of December until mid-February. This period will be extended by the Winter Manager if deemed appropriate.

▪ **Priority 2/3 Footways**

Priority 2 and 3 Footways will be restricted to the normal working hours (Mon to Fri 07:30hrs - 16:00hrs). A decision to extend this coverage will be taken by the Winter Manager as conditions dictate and resources permit.

3.5 Car Parks – Priorities

Fife Council operates a number of car parks which are prioritised as per table below: -

Classification	Description	Details	No. of Routes	Network coverage
Primary	Priority 1 Car Parks	▪ Fee paying, railway station and Park and Ride car parks.	N/A	N/A
Secondary	Priority 2 Car Parks	▪ Non-fee paying car parks and other town centre car parks.	N/A	N/A
All Other	Priority 3 Car Parks	▪ All other Council owned and/or operated car parks	N/A	N/A
Notes: 1. No treatment will be taken on privately owned car parks e.g. retail developments, shopping centres, medical centres etc.				

3.6 Car Parks – Treatment Standards

▪ **Priority 1 Car Parks**

Priority 1 Car Parks are included in the Primary Routes for roads, apart from those that have particular access difficulties for bulk gritters which will operationally be treated as a Priority 2 Car Park.

Consequently treatment of all accessible Priority 1 Car Parks will be consistent with that of Primary Carriageway Routes.

▪ **Priority 2/3 Car Parks**

Pre-salting of Priority 2 & Priority 3 Car Parks will not be undertaken.

Priority 2 Car Parks may be treated for ice and snow in order of priority once Priority 1 Car Parks have been satisfactorily attended to and subject to available resources. Treatment of ice formation will only be undertaken in exceptional circumstances of thick and persistent frost lasting for several days.

Treatment of Priority 2 Car Parks will not take place out with the normal working weekday (Mon to Fri 07:30hrs - 16:00hrs) other than in exceptional circumstances where: -

- ~ widespread snow conditions exist, or
- ~ equipment and manpower resources permit, and
- ~ the requirements of Priority 1 Car Parks have been met

3.7 Cycleways – Priorities & Standards

All cycleways will be treated to the same standard as the surface they share (i.e. carriageway or footway)

Surfaced cycle only cycleways will only receive treatment in exceptional circumstances and where resources allow.

3.8 Grit Bins

▪ **Standards**

Grit Bins are provided for community self-help as, in severe conditions, it may be several days before treatments can be provided on minor routes due to Priority Route commitments. Grit bins: -

- ~ Are provided at known trouble spots e.g. steep gradients, sharps bends etc. and are located based on a predetermined assessment framework taking into account such factors as road classification, site gradient, aspect, altitude, anticipated usage and value to the local community.
- ~ Are not provided on any roads or footways that are located on Priority 1 and 2 carriageway treatment routes or priority 1 and 2 footway treatment routes.
- ~ Are only provided where the Council has a statutory obligation however additional “non-statutory requests” requests will be considered on a strictly rechargeable basis e.g. unadopted roads, private business premises, community use buildings etc.
- ~ Will remain in position throughout the year, apart from at locations of high vandalism or nuisance. Where they are removed during the non-winter months any relocation will be in consultation with appropriate elected members and in accordance with assessment framework.
- ~ Will be top opening, yellow in colour (other than in identified tourist areas) with a capacity between 300-400 litres.

- ~ Are replenished on an ad-hoc basis following specific customer requests (usually within 5 working days)
- ~ Are filled with a 1:3 mixture of salt : sand/grit

In severe conditions considerations will be given to bulk grit drops (e.g. one tonne bags) to supplement the existing grit bin network.

▪ **Level of Service/Provision**

Fife has a very high level of service for grit bins with in excess of 2,500 located across Fife. In order to comply with budget envelopes the allocation of grit bins has been capped and an optimisation programme is ongoing to ensure: -

- ~ Numbers of bins are sustainable with current and future budget envelopes
- ~ Bins are provided/located in accordance with Policy standards.
- ~ Locations of bins are optimised to provide maximum possible benefit and self-help usage with optimised locations agreed by elected members on a ward by ward basis.

For the location of Grit Bins go to www.fifedirect.org.uk and enter "Grit/Salt Bins" in the search facility.

▪ **Assessment Criteria**

In order to maintain grit bins numbers at sustainable level and to optimise locations etc. it is necessary to apply a consistent assessment criteria for each bin location. The assessment criteria framework is included in Appendix A. In addition to the framework criteria any specific site assessment required prior to determining the need for a grit bin must also take in account: -

- ~ Road classification
- ~ Road/footway geometry i.e. gradients/bends etc.
- ~ Aspect of location i.e. north/south facing
- ~ Amenity value and anticipated usage
- ~ Proximity to lower priority gritting routes (e.g. Priority 2 routes)
- ~ Any other location specific extenuating circumstances

▪ **Requests for New Grit Bins**

Current bin numbers are unsustainable therefore any requests for new bins can only be met by the relocation of lesser used/lower priority bins.

Where a new request has been made and meets the required assessment criteria a decision will be taken, in consultation with local elected members as appropriate, on whether or not to re-allocate an existing grit bin as per the request received.

Where a new request is made which does not meet the assessment criteria no bin will be provided.

In new housing developments grit bins to be provided by the Developer through Construction Consents to the specification, standard, assessment criteria and rating system of this policy.

For reference purposes the “Grit Bin Assessment Criteria” pro-forma is included in **Appendix D**.

Usage of bins is actively monitored with any unused/underutilised bins will removed and/or reallocated.

SECTION 4.0: PUBLICITY

General publicity for the policy and adopted standards will be achieved through the Fife Direct website (www.fifedirect.org.uk), regular newspaper and journal features.

Daily road condition and proposed action reports will be publicised via the Council’s website (www.fifedirect.org), social media networks and local radio stations.

During periods of severe weather additional information on road conditions and closures will be publicised via local radio stations and social media networks. Further information relating to weather related road closures and winter conditions will be also be available on the Fife Council website (www.fifedirect.org.uk)

In the event of expected poor road and weather conditions information will be passed, via the Emergency Planning Officer, to relevant Fife Council Services in order to assist in the implementation, in appropriate circumstances, of the Severe Weather Contingency Plan.

In addition Fife Council will periodically prepare and publish additional information relating to winter information and service delivery.

A Winter Gritting & Snow Clearing Service operational plan/guide will be produced annually to provide a user friendly detail and explanation of how Fife delivers the winter service. This brochure will be made available to the public on the fifedirect web site.

SECTION 5.0: PERFORMANCE MONITORING

Service delivery and the performance of the service provider will be monitored each winter season to enable periodic reports on activities including: -

- Route efficiency, coverage and fleet capacity
- Number of compliments, complaints and claims
- Adequacy and timing of weather forecasts
- Completion of routes within 3 hour period.

SECTION 6.0: CONSULTATION

Transportation & Environmental Services will periodically consult on the winter maintenance policy and operational plan in addition to undertaking an annual review process aimed at identifying possible revisions to the winter service. Those consulted will include: -

- Elected members
- The travelling public and residents of Fife
- Community Councils, Community Groups, Disability Groups etc.
- Fife Council Services e.g. Education and Children's Services, Housing Services, Emergency Resilience, Communities, etc.
- Emergency Services i.e. Police, Fire and Ambulance Services
- Road User Groups e.g. AA, RAC, Freight Transport Association etc.

SECTION 7.0: BUDGETARY PROVISION

The severity of any winter is unpredictable and subsequently it is not possible to predict the budget requirements in advance with absolute confidence. However Assets, Transportation & Environment are able to access extensive historical information which is taken into account during the budgeting process.

Dealing with a concentrated period of snow can be costly and subsequently may be perceived as a severe winter. However a period of prolonged marginal temperatures and wet conditions necessitating frequent and repeated pre-salting actions can also constitute a major contribution to actual costs. During such periods of repeated pre-salting the extensive scale of operations may not always be readily apparent. The total winter costs in any year comprise both **set-up** and **variable** elements.

Set-up costs include the provision and supervision of facilities and standby personnel including labour, plant, vehicles and equipment.

Variable costs include salt tonnages, pre-salting, patrols, inspections, grit bin placement and recovery, servicing/upkeep of grit bins, emergency salting and snow clearing in addition to any specific winter maintenance activities arising a result of winter weather conditions.

Set-up costs can account for as much as 60% of total winter costs; however the final cost for winter gritting and snow-clearing is determined by the severity of any winter season, the effect of which will always be reflected in the total sum of the variable costs incurred.

To allow for the delivery of a winter service during extreme weather conditions, Fife Council has retained sufficient financial reserves to cope with such weather related emergencies.

APPENDIX A: RESOURCES

▪ Roads Operations

Winter Plant	
Vehicle Type	No.
6cum Four Wheel Drive fixed body gritter	15
6cum Gritter / Tipper Quick Change Body	6
6cum Gritter / Gully Tanker Quick Change Body	2
6cum Gritter / Tipper Hook Lift	2
3cum Gritter / Tipper Hook Lift	5
Total	30

The Service also has the following vehicles available when severe weather occurs:-

- 11 number 6.5 tonne pickups with 1.2 cu m demount gritters and slush blades
- 8 number 18 tonne Tippers fitted to accommodate slush blades
- 8 number JCB 2CX Streetmaster fitted with ploughs
- 3 number JCB 3CX Sitemaster fitted with ploughs

Mid, South and North Area duty rosters consisting of, in total, 28 standby personnel from the end of October until the end of March.

▪ Building & Environmental Services (PSOS)

34 footway compact tractors c/w drivers; 1 co-ordinator, 3 supervisors, 24 others for assistance with core employees contracted on standby on Public Holidays and Weekends, from the 30th of November until the 17th of February. This standby may be extended by the Winter Manager if conditions dictate.

In extreme/severe weather all of PSOS employees will be made available for winter duties.

▪ Building & Environmental Services

When weather conditions prevent the delivery of normal outdoor duties of Building Services employees, they will be allocated to the most appropriate Transportation Depot to assist in the delivery of a prioritised winter service under the direction of the Winter Manager

Note: - For Building & Environmental Services - no internal transaction payments will be made during normal working hours for the provision of these Council Services. Overtime and standby payments will be made through the Winter Maintenance budget controlled by Roads & Transportation Services.

APPENDIX B: SALT RESILIENCE

Salt Resilience Levels:

Salt resilience is monitored nationally over the full course of the winter period to provide a national position and allow, where required, the opportunity for mutual aid across all Scottish local authorities.

Resilience is calculated in days using the tonnage required to complete three 20g/m² treatments on the precautionary treatment network i.e. the area of roads network treated based on forecast received.

Due to the variances in Policy etc. there is no national standard for minimum day's resilience however Fife has set a pre-winter resilience level of 40 days with stock levels calculated as per table below.

Salt Stocks and Pre-season Resilience Level				
Route Priorities	Precautionary Winter Network (tonnes x treatments)	Minimum Winter Network (tonnes/day)	Days Resilience	Tonnage Required
Primary	150 x 3 runs	450 tonnes	40	18000
All other carriageways car parks & cycle ways	25% of Precautionary network tonnages		N/A	4500
Footways & Salt bins	1000t footways/500t bins		N/A	1500
			Total	24,000 tonnes

In addition the national arrangement Fife also has reciprocal mutual aid arrangements in place with fellow ELBF members.

Salt Usage History:

Year	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Salt Used	20,365t	21,462t	25,734t	14,500t	26,000t	16,360t	12,500t	12,500t	10,922t	24,624t

On the basis of recent winter experience and the inability of the UK Salt Industry to meet consumption levels, it is proposed to maximise the Fife salt holding at the commencement of winter to a level that guarantees resilience against the national standards including mid-season restocks as required.

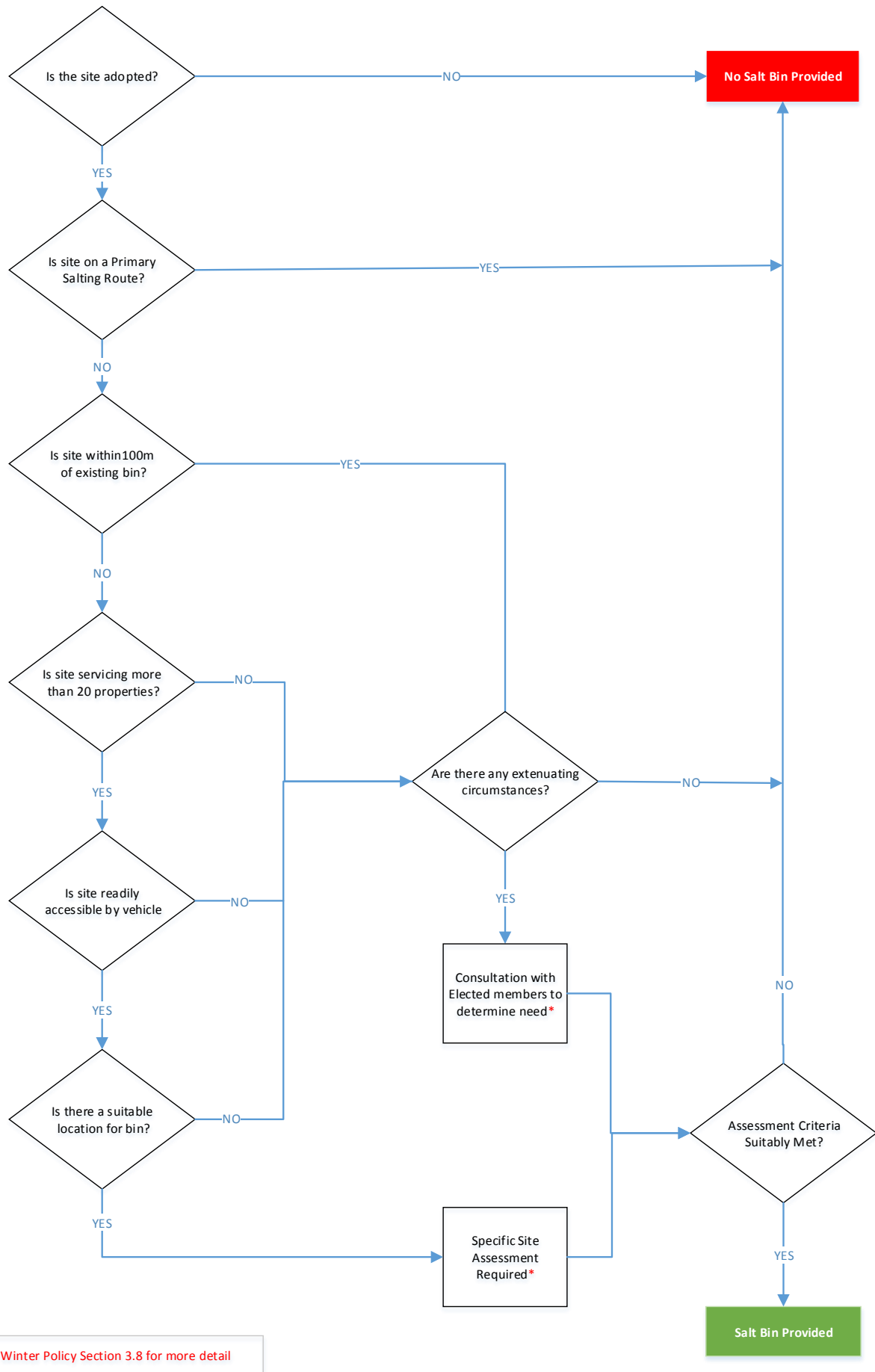
APPENDIX C: SUMMARY TREATMENT MATRIX (V1)

Matrix as per Well Maintained Highways (Appendix H) reviewed and approved by ELBF winter sub group 11.09.18

Frost or forecast frost Road Surface Temperature and Road Surface Wetness	C Poor Cover (salt stored uncovered) Medium Traffic Normal Loss	K Good Cover (salt stored under cover) Medium Traffic Normal Loss	Comments
RST at or above -2 deg and dry or damp road conditions	10	10	
RST at or above -2 deg and wet road conditions	15	10	
RST below -2 deg and above -5 deg and dry or damp road conditions	(15 or 20) ₁	(10 or 15) ₁	¹ Spread rate dependent on residual salt on road surface
RST below -2 deg and above -5 deg and wet road conditions	1 x 20 & monitor & treat as required)	20	
RST at or below -5 deg and above -10 deg and dry or damp road conditions	(1 x 20 & monitor & treat as required) ₁	20	¹ Spread rate dependent on residual salt on road surface
RST at or below -5 deg and above -10 deg and wet road conditions	(1 x 20 & monitor & treat as required)	(1 x 20 & monitor & treat as required)	

Precautionary treatment before snow / freezing rain		
Light snow forecast (light snow is defined as <10mm)	20 to 40	Dependent on capability to complete route within reasonable time and monitor for further action
Moderate / Heavy Snow forecast (defined as ≥10mm)	20 to 40	Dependent on capability to complete route within reasonable time and monitor for further action
Freezing Rain forecast	2 x 20	Spreading salt before freezing rain can have a limited benefit and follow up treatments will be delivered on any ice that has formed
Treatment when ice formed		
Ice formed up to 1mm RST higher than -5 deg C Medium / Light traffic	20	Winter Officer to monitor for further treatment
Ice formed up to 1mm RST lower than -5 deg C Medium / Light traffic	20	Winter Officer to consider and seek approval for 1:1 mixture and further assess spread rate
Treatment during snowfall		
Continuous snow falling	20	Winter Officer to monitor for further treatment
Snow forecast for during the night	Patrol	Winter Officer to monitor for further treatment
Treatment for slush when freezing conditions are forecast		
Plough to remove as much slush as possible before treating	2 x 20	Winter Officer to monitor for further treatment
Treatment for thicker layers of compacted snow and ice		
Medium layer 1 to 5 mm initial treatment	20 to 40	Dependent on capability to complete route within reasonable time and monitor for further action. Winter Officer to consider and seek approval for 1:1 mixture
High Layer Thickness greater than 5mm Initial treatment	20 to 40	Dependent on capability to complete route within reasonable time and monitor for further action. Winter Officer to consider and seek approval for 1:1 mixture. For successive treatments spread abrasives only after traffic has started breaking up the layer spread at 20g/m ² of salt / abrasive mixture

APPENDIX D: GRIT BIN ASSESSMENT CRITERIA



* See Winter Policy Section 3.8 for more detail

APPENDIX E: FURTHER INFORMATION/CONTACTS

Further information on Winter Gritting & Snow Clearing issues can be obtained from the contacts as detailed below:-

FIFE-WIDE SERVICE / POLICY ISSUES:

Ken Gourlay

Head of Assets, Transportation & Environment

Email: ken.gourlay@fife.gov.uk

Derek Crowe

Senior Manager, Roads & Transportation Services

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OPERATIONAL SERVICE DELIVERY ISSUES:

FIFE – WIDE

Bill Liddle

Service Manager (Roads Maintenance)

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North East Fife, Glenrothes and Levenmouth Areas

Lynne Davidson

Lead Consultant (Roads Maintenance)

Email: lynne.davidson@fife.gov.uk

Kirkcaldy, Dunfermline, Cowdenbeath and South West Fife Areas

Kane Smith

Lead Consultant (Roads Maintenance)

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OPERATIONAL SUPPORT ISSUES

(Weather Forecasting Service, Salt Purchase etc):

Ian Smart

Service Manager (Asset Management & Commercial)

Email: ian.smart@fife.gov.uk