

Winter Service Policy

Document Details:

Status: Final version 1.0

Date: October 2009

Document Location:

U:\U163 ES\U343 Winter Maintenance\13 Policy\2009 Policy

www.worcestershire.gov.uk

Worcestershire County Council

Winter Service Policy October 2009

Contents

1.	Introduction	1
2.	Legislation	1
3.	Objectives of Winter Service	2
4.	Weather Forecasting and Monitoring	2
5.	Precautionary Salting	3
6.	Snow Clearing of Carriageways, Footways and Cycleways	4
7.	Salt Stocks	5
8.	Critical Salt Levels Emergency Plan	6
9.	Grit bins	7
10.	Cross-boundary arrangements	9
11.	Winter Service Operational Plan	9
12.	Communications and Publicity	9

1 Introduction

The purpose of this policy is to set out the principles that the County Council uses to meet its obligations and duties in respect of the winter service. It lays down which categories of road are to be treated, in what order of priority, and how quickly they should be treated. It is intended, through the use of this Policy, to ensure that there is a uniform level of service throughout the county.

This policy reflects the recommendations of Well-maintained Highways: Code of Practice for Highway Maintenance Management (Roads Liaison Group, July 2005).

The County Council, as the Highway Authority, is responsible for providing a winter service on adopted public highways within the county except for motorways and trunk roads. The purpose of the winter service is to provide assistance to road users by treating the highway network to mitigate the effects of ice and snow and to maintain traffic movements, whilst minimising the impact of the service operations on the environment.

The service is essential for public safety and to the national and local economy in maintaining movement of vehicular traffic, cycles and pedestrians. Owing to limited resources and available finance it is essential that provision of winter service reflects the importance of traffic routes. It will not be reasonably practicable to provide the service on all parts of the network or to ensure all surfaces are kept free of ice or snow at all times, even on the treated parts of the network.

The objective is that a network of treated routes should be reasonably accessible for the majority of residents and businesses, supplemented by targeted provision of self-help facilities.

2 Legislation

Section 41 of the Highways Act 1980 imposes a duty on highway authorities to maintain highways maintainable at public expense. In particular, Section 41 (1A), as inserted by Section 111 of the Railways and Transport Safety Act 2003, imposes a duty on highway authorities to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

The Department for Transport has advised that it is for the courts to decide what is reasonably practicable. However, the Department strongly recommends that local highway authorities carry out winter maintenance in accordance with Section 13 of Well-maintained Highways: Code of Practice for Maintenance Management. Amongst other recommendations, the Code states that best practice would be for local highway authorities to adopt and publish a Winter Service Operational Plan, reviewed annually to take account of changing circumstances.

Under Section 150(1) of the Highways Act 1980, there is a requirement for the Highway Authority to remove an accumulation of snow which forms an obstruction, and Section 150(3) of the Act states that the following factors should be taken into account:

- (a) The character of the highway and the nature and amount of traffic using it.
- (b) The nature and extent of the obstruction.
- (c) The resources of manpower, vehicles and equipment available to the Highway Authority and extent to which those resources are being, or need to be, employed on such work.

Thus it is recognised that it would not be practical for a Highway Authority to treat all roads and footways in the event that ice forms or snow falls.

3 Objectives of the Winter Service

The objectives of the winter service, so far as is reasonably practicable, are to:

- **Ensure the safe movement of vehicles and pedestrians on the highway network.**
- **Minimise delays, accidents and damage to the highway resulting from ice and snow**
- **Undertake the winter service effectively and efficiently within the limitations of finite resources according to network hierarchy and severity of weather conditions.**

The winter service season starts on 15 October and finishes on 15 April. Provision of winter service may be extended to suit seasonal variations in weather.

4 Weather Forecasting and Monitoring

Weather information will be obtained from specialist forecasters, roadside monitoring stations and in unpredictable circumstances it may be supplemented by patrol inspections.

The County Council maintains a contract with an appropriate forecasting organization that provides daily weather forecasts that are detailed for Worcestershire and updated frequently. In addition, forecasters are available at any time of the day or night to discuss the forecast and changes in conditions. Additional real-time information is provided by a network of roadside sensor stations around the county that report on air temperature, ground temperature, relative humidity and in some cases provide local site forecasts.

When available forecast information is uncertain or conditions are changing unpredictably, winter service inspectors may be mobilized to report on conditions along pre-determined routes or at specific points of interest.

These sources of information inform treatment decisions that are made by the duty winter service supervisor.

5 Precautionary Salting

Winter Service operations will give priority to routes comprising the Principal Road Network, main and secondary distributor roads, links to villages, major bus routes, emergency service locations and reasonable proximity to schools.

Precautionary salting is carried out on approximately 30% of the road network. Precautionary routes are reviewed annually by the winter service manager taking into account any service requests received or difficulties encountered in delivering the service during the previous winter season.

Precautionary Network

The Precautionary Network is pre-defined and comprises:

- The Principal Road Network, Main Distributor roads and Secondary Distributor roads (as defined in the carriageway hierarchy).
- Commuter routes (rural roads carrying more than 2,000 vehicles per day).
- Locally Important roads in the carriageway hierarchy and at least one route in to all villages so far as is as reasonably practicable.
- Major bus routes (in urban areas roads with 8 or more service buses per hour and in rural areas 2 or more service buses per hour).
- No greater than 500m from a school.
- Emergency Service locations - police stations, fire stations, hospitals and ambulance stations.

Treatment of the precautionary network takes place in accordance with available forecast and local condition information and the decision matrix in the Winter Service Operational Plan. The aim is to treat the precautionary network in advance of the onset of potentially hazardous conditions so far as is reasonably practicable. Treatment is usually carried out during the evening so as to avoid late afternoon traffic and to limit disruption to operations next working day due to statutory limits on driver's working hours, or is carried out at suitable times if the next day is not a working day. There will be some occasions when prevailing weather conditions make late-call or night-time treatment unavoidable.

The response time for the precautionary network from the point at which gritting is called to the point at which the gritters leave the depots is 1 hour. The target completion time for each route is 2.5 hours from the point at which the gritter leaves the depot to the point at which treatment is complete.

Secondary Network

The Secondary Network is pre-defined and comprises:

- Less important local, village and estate distributor roads having significant traffic flows.
- Minor bus routes (in urban areas roads with 7 or less service buses per hour and in rural areas 1 or less service buses per hour).
- School transport routes operated by Worcestershire CC.

Treatment of the Secondary Network takes place **after** the Precautionary Network has been completed, so long as physical resources are available and are not needed on the Precautionary Network, and in exceptional conditions such as freezing rain forming ice on surfaces and heavy falling or lying snow. Hoar frost is not treated unless conditions are exceptional.

Secondary routes are reviewed annually taking into account any service requests or comments received in the previous winter season.

Secondary Routes may be treated in exceptional conditions after operations are complete on the Precautionary Network subject to resources being available.

6 Snow Clearing of Carriageways, Footways and Cycleways

Priority for snow clearance is given to classified A roads followed by B roads on the precautionary network. During prolonged periods of adverse conditions footways and cycleways in town centres are cleared according to network hierarchy and resources being available.

The objective will be to carry out snow ploughing/clearing operations to maintain carriageways open to traffic, to remove blockages and to re-open routes by salting, gritting, ploughing, excavating and snow blowing as appropriate to the conditions.

Where forecasts indicate that adverse conditions are likely to result in the need for snow clearance, appropriate resources are placed on standby to be mobilised. Appropriate resources can be any of the County Council's highway contractors, pre-assessed private contractors and individuals with suitable equipment, and resources and contractors of other councils and public bodies.

Primary network

Priority is given to clearing the roads on the precautionary salting routes. Snow clearance routes will generally follow the precautionary salting routes with priority being given to clearing the classified A and B roads first, followed by the other roads included in the precautionary routes.

In prolonged or very severe snowfalls, resources will be concentrated on keeping the principal traffic routes (class A roads) open and only after this objective has been achieved will attention be given to the remaining roads on the precautionary salting routes.

Where conditions or site circumstances require, 24 hour working will be introduced to maintain or restore the principal traffic routes to provide a basic network from which further snow clearance operations can proceed.

Other roads

Snow clearing of all other roads is restricted to normal working hours and proceeds only when the precautionary salting network has been cleared.

In such circumstances there will be a delay from the onset of adverse weather conditions to the commencement of clearance operations. Priority will then be given to re-opening a route into isolated communities from the main road network.

Footways

The clearance of snow from footways is undertaken when labour resources normally employed on highways maintenance work and precautionary salting become available.

Priority attention is given to categories 1A and 1 footways in town centres and clearance work will be restricted to normal working hours.

Cycleways

The clearance of snow from cycleways is undertaken when labour resources become available after priority footways have been cleared.

Priority attention is given to cycleways in town centres and clearance work will be restricted to normal working hours.

7 Salt stocks

Salt is restocked during the summer in advance of the winter season. Restocking during the winter is dependent upon operational requirements.

Salt for use in gritters is 6mm size rock salt or marine salt. Salt for use in grit bins is mixed with ash or fine grit or both to extend the quantity and to discourage inappropriate use and theft.

Salt is restocked over the summer months when prices are lower plus demand on salt suppliers is minimal and it can therefore be planned and coordinated with the supplier and contractor to minimise cost.

Following the national salt supply crisis in February 2009, the capacity of the salt barns is increased from 8,100 tonnes to 10,600 tonnes in total. This is achieved by an increase in stockpile height from 2.4m to 3.0m and by filling all barns to maximum capacity before the start of the winter season. There would be additional cost involved in redistributing salt in the event that it was to be required during the season, and in any event towards the end of the season as stocks are run down in order to prevent stockpile consolidation and to prepare for summer restocking.

By careful use of advance weather forecasts the aim is to reduce stocks towards the end of the winter season in order to enable salt barn maintenance and restocking at summer supply rates.

8 Critical Salt Levels Emergency Plan

In the event that salt stocks approach critical levels, a Silver Control is called and salt conservation measures initiated.

This Emergency Plan is for use when salt stocks across the County are predicted to fall below 1000 tonnes and prolonged Severe Winter Weather is forecast.

As soon as it is identified that this condition is likely to develop, a Silver Control involving internal and external stakeholders and the emergency services is to be called.

Salt supplies

In the event that supplies from the contracted supplier are insufficient or stopped the following action or actions are to be taken:

- Continually press the supplier to increase deliveries stressing how many grit runs remain so that the urgency is clear.
- Contact alternative suppliers.
- Contact adjacent highway authorities requesting supplies on loan or for purchase.
- Contact the Highways Agency for assistance.
- Work with any national arrangements in place for salt priority distribution.

Extending existing salt stocks

Targeting barns with the least stocks first, extend rock salt by pre-mixing with fine 3mm aggregate or sharp sand in a proportion of 1:1 or as may be deemed appropriate.

Conserving salt stocks – general actions

The purpose is to extend the availability of salt or salt mixtures for use on strategic routes.

Actions can be one or any of:

- Cease refilling of grit bins.
- Cease responding to requests for spot treatment. Exceptions may be made for genuine immediate emergencies involving threat to life.

- In snow conditions, plough routes without salting if practical. When snowfall ceases, assess the conditions and consider applying salt, salt/grit mixture or grit to the ploughed surface.
- Allow snow to compact under the action of traffic on some or all of the precautionary routes without salting.

Conserving salt stocks – route restrictions

Actions can be one or any of:

- Reduce the extent of initial ploughing on Precautionary Network routes.
- Treat only primary precautionary routes, no secondaries.
- Treat ploughed routes only on a pre-defined core primary network principally consisting of ex-trunk routes, routes linking major population centres to principle emergency facilities and linking to national trunk routes.

Media

Engage with the media to provide realistic expectations of people's ability to travel for essential purposes only.

Update the website.

9 Grit Bins

Grit bins will normally be provided and maintained with stocks of salt/grit mixture where they provide a necessary improvement to road safety and benefit to the community subject to assessment of each location using consistent methodology and available resource.

Requests and reviews will take into account the available resources for providing the winter service.

All grit bins provided and maintained with stocks of highway salt will be clearly labelled 'WCC - Highway Use Only'.

Grit bins for carriageways

Grit bins will generally be provided when determined using the Carriageway Grit Bin Assessment Form (Appendix A), subject to the following:

Grit bins for carriageway use will not be provided:

- On roads that form part of precautionary or secondary gritting routes, except at known points of difficulty on steep gradients in severe winter conditions and subject to site assessment.

- Where they attract anti-social behaviour or cause nuisance to nearby residents.
- Where their provision would create a further proliferation of street furniture to the detriment of disabled or visually impaired people and/or the community.
- Where there are no suitable arrangements for the use of the grit bin.
- On unadopted highways whether subject to future adoption or not.

For locations that are not on precautionary or secondary gritting routes, higher weighting for provision of carriageway grit bins will be given to:

- Higher speed roads.
- Gradients at or steeper than 1:15 (6.7%).
- Locations serving greater numbers of premises.
- Locations with only single access to shops or industrial premises.
- Greater presence of people with disability or vulnerability.

Roadside rucks or salt piles are no longer permitted because they are a source of concentrated and localised environmental contamination.

Grit bins for footways

Grit bins will generally be provided when determined from the Footway Grit Bin Assessment Form (Appendix B), subject to the following:

Grit bins for footway use will not be provided:

- Where they attract anti-social behaviour or cause nuisance to nearby residents.
- Where their provision would create a further proliferation of street furniture to the detriment of disabled or visually impaired people and/or the community.
- Where there are no suitable arrangements for the use of the grit bin.
- On unadopted highways whether subject to future adoption or not.

Higher weighting for provision of footway grit bins will be given to:

- Higher usage footways.
- Gradients at or steeper than 1:15 (6.7%).

- Greater presence of people with disability or vulnerability.
- Locations that are not on the precautionary salting network.

Grit bins for cycleways

Assessment of locations for provision of grit bins for cycleways shall be the same methodology as for carriageways.

10 Cross-boundary arrangements

Reciprocal arrangements may be made with neighbouring authorities for precautionary gritting.

Reciprocal arrangements for precautionary gritting may be made with neighbouring authorities under section 8 of the Highways Act 1980 and confirmed by exchange of letter before each season.

11 Winter Service Operational Plan

A Winter Service Operational Plan is to be maintained that details the necessary procedural and functional arrangements necessary to provide the service in accordance with this Policy. The Operational Plan is to be reviewed annually after the end of the winter season.

- The Operational Plan includes such things as:
- Details of the precautionary and secondary routes.
- Precautionary decision matrix.
- Arrangements for communications between the Winter Service Supervisors, contractor, inspectors and emergency services.
- Procedures for linking to weather forecasters and Bureaux services.
- Procedure for recording daily decisions and actions during the winter season.
- Record of current Winter Service fleet vehicles and equipment.
- Pre-season fleet preparation activities.
- Inspection routes.
- Snow clearing zones and arrangements.
- Prolonged severe weather arrangements.
- Salt restocking arrangements.

12 Communications and Publicity

The primary means to inform the public about the Winter Service is on the Worcestershire Hub/County Council web pages and this may be supplemented by press releases and printed materials.

Information necessary to assist the public in understanding the objectives of the Winter Service includes plans of the primary precautionary routes and the typical conditions in which they are treated and also the secondary routes and the conditions that trigger their treatment. The principle criteria used in assessing placement of grit bins and also where they are not placed will inform people of this part of the service. Supplementary information on how weather information is collected will also be helpful.

Advice on winter driving can assist drivers to drive according to conditions on both the web pages and in publicity through the local press. In prolonged severe weather conditions additional information is made available through all available media.