

Winter Service 2025/26

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Winter Service

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Winter Service

<u>Introduction</u>

This Policy identifies and outlines the plans and procedures for the delivery of Highway Winter Services within the City of Doncaster.

1. Objectives and limitations.

1.1. Objectives

To provide a winter service, which, as far as is reasonably financially affordable and physically practicable, will:-

- a. permit the safe movement of vehicular and pedestrian traffic on the adopted highway network,
- b. reduce the impact of the weather conditions on the national and local economy by maintaining movement of traffic and pedestrians,
- c. minimise delays and incidents directly attributable to the adverse weather conditions.

1.2. Limitations.

Given the scale of the financial, physical and other resources involved in delivering the Winter Service, the variety of weather conditions that may be encountered and the difficulties in maintaining high levels of plant utilisation for specialist equipment, it is not practically possible to:-

- a. provide the service on all parts of the network; or
- b. ensure running surfaces are kept free of ice or snow at all times, even on the treated parts of the network.

2. Safety, Serviceability and Sustainability

2.1 Safety

Winter Service Operations are essential for public safety. The carrying out of various salting activities and clearing the highway of snow help to achieve this together with advising the public on travelling in winter and self-help.

2.2 Serviceability

Maintaining the availability and reliability of the highway network is a key objective for the Winter Service. It is one where the user will tend to make judgements of performance immediately rather than longer term.

2.3 Sustainability

Low temperatures and the formation of ice can cause serious damage to the fabric of the highway running surface. Winter Service operations can therefore make an important contribution to whole life costs and performance of the highway.

The environmental impact of the service can be minimised by the appropriate use of materials, vehicles etc.

3 Legislation and Guidance

Legislation and guidance supporting the provision of winter service is that which is relevant to England, provided by the following Acts, Codes of Practice, Regulations and Guidance:-

- 3.1 Acts:-
- 3.1.1 Highways Act 1980 Section 41 and 150

The Highway Authority has a duty to clear highways of obstructions due to snow as well as taking reasonable precautions to keep the carriageway and footways free of ice.

3.1.2 The Railways and Transport Safety Act 2003 Section 111 (highways: snow and ice)

After section 41(1) of the Highways Act 1980 (c.66) (duty of highway authority to maintain highway) insert: - "(1A) In particular, a highway authority is under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice."

"This is not an absolute duty, given the qualification of 'reasonably practicable', but it does effectively overturn previous legal precedence, albeit not with retrospective effect. Section 150 of the Act still imposes a duty upon authorities to remove any obstruction of the highway resulting from 'accumulation of snow or from the falling down of banks on the side of the highway, or from any other cause'.

3.1.3 Traffic Management Act 2004 – Network Management Duty

Part 2 of the Act places a network management duty on Local Traffic Authorities. Section 16 (1) states:

"It is the duty of a local traffic authority to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies and objectives, the following objectives:

(a) securing the expeditious movement of traffic on the authority's road network; and

- (b) facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority."
- 3.1.4 Health and Safety at work Act 1974.Doncaster Council Risk Assessments.
- 3.2 Codes of Practice:-
 - 3.2.1 Well Managed Highway Infrastructure: A Code of Practice
- 3.3 Regulations:-
 - 3.3.1 Working time regulations.1998
 - 3.3.2 Drivers hour's rules
- 3.4 Guidance:-
 - 3.4.1 National Winter Service Research Group Practical Guidance. (NWSRG)
 - 3.4.2 The resilience of England's Transport Systems in Winter Oct 2010. (DfT)
 - 3.4.3 DMBC Winter Service Operational Document

4. Winter season

Generally three distinct risk periods for winter conditions are identified, High Marginal and Low.

For Doncaster these are identified in the table below

Period	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Marginal							
(during which							
severe							
conditions are							
unlikely)							
Low							
(during which							
severe							
conditions							
could arise)							
High							
(during which							
severe							
conditions							
might							
normally be							
expected)							

Priorities and treatments.

5. Carriageway Network

5.1 Carriageway Priorities and treatments.

Network	Description	Precautionary Treatment
Priority		
1	Comprises the Strategic	Precautionary salting or salting for
	Network and Primary Route	the treatment of ice shall be
	Network. (See Appendix A2).	undertaken whenever necessary.
2 & 3	Comprises other 'A' class	These roads shall be treated in the
	roads 'B' roads, some 'C'	same way as, Priority 1 roads.
	class roads and other roads providing main traffic links in urban areas and serving industrial estates.	Treatment of priority 1, 2 & 3 networks may be combined for treatment.
4	This network covers urban	These roads shall not normally
	and rural link roads, other	receive precautionary salting and
	well-used roads and most	will be salted only in periods of
	roads served by bus services.	severe weather*(see sec 19). if the
	(Secondary routes)	gritters are not required to deal with
		Priority 1, 2 and 3 roads.
5	Comprises the remainder of	As Priority 4 roads but following
	the rural/urban network.	their treatment.

5.1.1. Requests from emergency services.

Requests from the emergency services for localised treatment of the highway due to accidents or similar shall be actioned as soon as reasonably possible (all relevant details must be recorded.)

5.1.2 Requests for a street(s) to be added for priority 2, 3 or 4 treatments.

Any requests for additions to the priority 2, 3 or 4 network schedules will be considered against the following criteria: - Usage type and numbers, local climate, available alternatives, recent changes in network layout or usage and the availability of physical and financial resources. (This salting network review will generally only be undertaken during the pre-winter planning stage each year).

5.2 Treatment operations.

- i. For precautionary salting the priority 1, 2 & 3 networks are normally treated in a combined manner in order to optimise the efficiency of the salting operations. (See plan at appendix A3)
- ii. On occasions, dependant on forecast weather conditions the Priority 1 network may be treated independently due to working / duty hours' time constraints.
- iii. Should issues occur beyond the control of the authority, it may on occasions, be necessary to reduce network treatment or the treated network. Should such a situation arise treatments may be reduced to either Priority 1 or Priority 1 & 2 roads. (Subject to discussions with senior management prior to any implementation see 24.2.3)
- iv. Where time, resources and working hours permit, and it is expedient to do so, all or some of the Priority 4 carriageway network, may, in advance of forecast severe weather*(see sec 19), receive some pre-treatment.
- v. Salting shall not be undertaken between the stop lines of level crossings, even when covered with snow, as guided by Network Rail and Well Managed Highway Infrastructure Code of Practice.

6. Footway Network Priorities and Treatment.

Priority	Description	Overnight	Daytime Frost	Extended Frost
		Frost		
1	High usage areas with localised known cold spots.	Treatment completed by 08:00 hrs next day.	Monitor and reactive treatment as necessary	Monitor and reactive treatment as necessary
1a	Busy urban shopping areas and main pedestrian routes outside hospitals.	No Precautionary treatment	Monitor and reactive treatment as necessary – within available resources	Monitor and reactive treatment as necessary – within available resources
2	Medium usage routes through local areas feeding into priority 1 locations. Outside local shopping / medical centres, schools etc. Particularly steep gradients / steps where there are heavy concentrations of pedestrians.	No Precautionary treatment	Monitor and reactive treatment as necessary following any priority 1 & 1a works and within available resources	Monitor and reactive treatment as necessary following any priority 1 &1a works and within available resources.
3	Linking local access footways through urban areas paths adjacent to OAP housing areas other steep gradients and busy footways.	No Precautionary treatment	No planned treatment.	Monitor and reactive treatment as necessary following Pr 2 footways – within available resources
4	Footways associated with low usage, short estate roads to the main routes and cul-de-sacs.	No Precautionary treatment	No planned treatment	Monitor and reactive treatment as necessary following Pr 3 footways – within available resources
Subways	Access ramps and slopes	Monitor and reactive treatment as necessary	Monitor and reactive treatment as necessary	Monitor and reactive treatment as necessary
Footbridges **	Steps / ramps / decks	Treatment completed by 08:00 hrs next day.	Monitor and reactive treatment as necessary	Monitor and reactive treatment as necessary

^{**} Treatment of footbridges may vary from that for other footway areas dependant on forecast conditions given that they can be colder than other surfaces.

7. Cycleway Priorities and Treatment.

Priority	Description	Overnight	Daytime Frost	Extended Frost
		Frost		
1	Cycle lane forming part of	Treatment included	Treatment included	Treatment included
	the carriageway	where on a	where on a	where on a carriageway
		carriageway priority	carriageway priority	priority 1, 2 or 3 route.
		1, 2 or 3 route.	1, 2 or 3 route.	
1a	High usage cycleway with	Treatment	Monitor and	Monitor and reactive
	localised known cold spots.	completed by 08:00	reactive treatment	treatment as necessary
		hrs next day.	as necessary	
2	Cycle track. Non-contiguous	No precautionary	No Precautionary	Treatment undertaken
	with the carriageway and	treatment.	treatment	when resources
	shared cycle / pedestrian			available in conjunction
	paths segregated or non-			with Pr3 footways.
	segregated.			
3	Cycle trails	Not covered under	Not covered under	Not covered under this
		this policy	this policy	policy

8. <u>Treatment for Snow Conditions</u>

8.1 Carriageways

Snow clearing / ploughing will not usually commence until the snow depth exceeds 25mm with further amounts of falling and settling snow expected.

Ploughs shall be set to clear <u>all possible</u> snow from the carriageway surface and shall follow any specific guidance contained in the operational details.

Note: - Pre-salting carried out in advance of snow and the action of traffic thereon greatly assists in the dispersal of lying snow.

8.1.1. Carriageway action for snow.

Network	Description	Treatment for Snow
Priority		
1	Comprises the Strategic and	In the event of snow, ploughing
	Primary Road Network.	shall continue until all traffic lanes
		are clear. **
	See (Appendix A2).	
2 & 3	Comprises other 'A' class roads	These roads shall be treated in the
	'B' roads, some 'C' class roads	same way as, but following or in
	and other roads providing main	conjunction with the Priority 1
	traffic links in urban areas and	network.**
	serving industrial estates.	
4	This network covers urban and	When necessary, snow clearing
	rural link roads other well used	shall commence as soon as
	roads and most roads served by	possible once the Priority 1, 2 and
	bus services.	3 roads have been cleared.
5	Comprises the remainder of the	As Priority 4 roads but following
	rural/urban network where	their treatment.
	accessible by the gritting	
	vehicles.	

8.1.2 Streets with traffic calming and Railway Crossings **

Any streets where traffic-calming measures have been introduced that impede effective, efficient or safe ploughing actions, may not be attended to in advance of priority 4 streets.

Before any ploughing commences over any level crossing the driver must stop and telephone the signalman for permission to proceed and then inform the signalman when past the crossing as guided by Well Managed Highway Infrastructure – Code of Practice.

8.1.3. Use of other resources

When conditions are such, additional resources, (i.e. local farmers or contractors) maybe called on to assist with additional snow ploughing actions. Recognised Snow Wardens may also assist in their local areas.

8.2 Footways

Priority	Description	Treatment for Snow
1	High usage areas with localised known cold	Monitor and reactive treatment as
	spots.	necessary, within available resources.
		When time and resources allow
		precautionary treatment will normally be
		undertaken in advance of snowfall.
1a	Busy urban shopping areas and main	Monitor and reactive treatment as
	pedestrian routes, Outside hospitals,	necessary, within available resources.
		When time and resources allow some
		precautionary treatment may be
		undertaken in advance of snowfall.
2	Medium usage routes through local	Monitor and reactive treatment as
	areas feeding into priority 1 locations.	necessary – within available resources
	Outside local shopping / medical	following Pr 1 & 1a footway treatments.
	centres, schools etc. Particularly steep	
	gradients / steps where there are heavy	
	concentrations of pedestrians.	
3	Linking local access footways through	Treatment not normally undertaken except
	urban areas paths adjacent to OAP	in specific circumstances i.e. during
	housing areas other steep gradients and	severe weather – Following Pr 2 and
	busy footways.	within available resources.
4	Footways associated with low usage	Treatment not normally undertaken
		except in specific circumstances i.e.
		during severe weather and within
		available resources following Pr 3 work.
Footbridges /	Access ramps / steps/ decks	Monitor and reactive treatment as
Subways		necessary. When time and resources
		allow precautionary treatment will
		normally be undertaken in advance of
		snowfall on footbridges.

A schedule of prioritised locations for footways will be prepared. (See Appendix B - Operational document).

8.2.1 Work on footways may be undertaken using any additional available resources from within the authority when available or by recognised Snow Wardens.

8.3 Cycle Ways

Snow clearing from cycle lanes and tracks may be attended to following necessary works on carriageways and footways and when suitable resources become available.

Category	Description	Treatment for snow
1	Cycle lane forming	Treatment included where on carriageway
	part of the	priority 1, 2 or 3 route.
	carriageway	
1a	High usage	Monitor and reactive treatment as
	cycleway with	necessary, within available resources. When
	localised known	time and resources allow precautionary
	cold spots.	treatment will normally be undertaken in
		advance of snowfall.
2	Cycle track. Non-	Where non-contiguous with the carriageway
	contiguous with	and shared with a priority footway the
	the carriageway or	cycleway will be attended to at the same
	Shared cycle /	time.
	pedestrian paths	
	segregated or	Other cycle tracks may be attended to as
	non-segregated.	resources allow following priority 3 footway
		treatments.
3	Cycle trails	Not covered under this policy.

Note:-

Given the location of cycle lanes where delineated by white lines within the carriageway it may not be possible to clear or remove snow from all of these areas.

9. Salt Bins

9.1 Provision

Salt bins can be a useful addition on the network if placed in appropriate locations, managed, serviced and utilised. It is unrealistic to place out bins in such numbers that they cannot be serviced and refilled when needed most.

Salt bins may be provided on, and for use within, the public highway where certain criteria are met.

9.1.1 Carriageways

- i. At sites on the public highway where the vertical or horizontal profiles are such that problems for the public may be foreseen and they are not on a Pr 1, Pr 2 or Pr 3 precautionary treatment route. (a vertical profile will normally need to exceed a gradient of 10%).
- ii. On precautionary treatment routes only where previous experience has shown a particular risk.

9.1.2 Footways

i. Where requested to help facilitate treatment on footways, these will be considered alongside those for carriageways.

9.1.3 Assessments

i. Given the number of requests for salt bins and the need to ensure a holistic approach to this area of the service, all current salt bins and requests for new bins will be subject to an annual review and a scored site assessment.

9.2 Removal.

 Salt Bins at locations that are subject to repeated vandalism or complaints will be removed. ii. Salt bins will be removed where network changes etc. are carried out, and the risks alleviated or removed, resulting in a reduced assessment score.

9.3 Location

- i Salt bins wherever possible shall be sited away from trees, hedges, grassed areas and watercourses etc. for environmental reasons.
- ii Bins shall only be located where they may be used safely and will not impede / obstruct the use of the highway.
- iii. For practicality and efficiency, salt bins will not be located closer than 250m to each other.

9.4 Maintenance

- i Bins will be checked, replaced, filled as necessary prior to the start of 'high' winter period and refilled as necessary subject to available resources until the 'high' winter period is over.
- ii Unless otherwise specifically identified, salt bins will remain on site outside of the winter period.

10. Winter Standby Period

10.1 The winter standby period is determined annually (in general it will be from the 1st Monday in November until the 2nd Monday in the following March). These start and finish dates do vary from year to year dependant on the seasonal forecast conditions and are agreed with the Head of Service for Highways.

10.2 A stand-by system will be operated which ensures drivers and supervisors will be available as far as is reasonably practicable, to carry out precautionary salting activities within the constraints of duty, driving hours and working time directive(s).

It is anticipated that under normal circumstances one evening action and / or one morning action will suffice.

10.3 It should be noted that there might be, on occasions, due to legislation on duty hours when precautionary salting cannot be undertaken at the most appropriate time reflective of the prevailing weather conditions.

11. Vehicles and Plant

11.1 Gritting Vehicles

11.1.1 A range of demountable and purpose built vehicles and pedestrian units will be maintained for gritting purposes. (See section B5 in the operational document)

11.2 Calibration and Monitoring

11.2.1 All vehicles shall be calibrated prior to the start of the winter season giving consideration to the materials being used and the manufacturer's specifications and recommendations. A calibration certificate is provided for each vehicle at the start of each winter period. Vehicles shall be monitored during the season for any signs of deviation from correct operation. Any suspected operating problems shall be reported and re - calibration or maintenance shall be carried out as necessary.

11.3 Other Plant

11.3.1 Additional plant and drivers may be hired in as necessary from local plant hire companies; farmer's etc.

12. Forecasting and Decision Making

12.1 Forecasting

12.1.1 The Authority will procure a weather forecasting service from a competent forecast provider for the period 1 October to 30 April each year. Should the winter period become extended for any reason this service may be extended as necessary.

12.2 Decision Making

12.2.1 Decisions shall be made based on the guidance contained in Well Managed Highway Infrastructure, and tables below.

Decision Making Procedure (For Guidance Only)

Expected to fall below 1°C Expected rain DURING freezing Possible rain Possible fog Expected snow No fog Expected hoar frost Expected fog Expected rain BEFORE freezing Salt after rain stops Salt before frost and after rain stops (see note C) Monit weath condition			Predicted Road Conditions			
May fall below 1°C No rain No hoar frost No fog No rain No hoar frost No fog No hoar frost No fog Expected hoar frost Expected fog Expected rain BEFORE freezing Possible rain Possible hoar frost Possible fog Expected snow Salt before frost and after rain stops (see note C) Salt before frost and after rain stops (see note C) Salt before frost and after rain stops (see note C) Salt before frost and after rain stops (see note C) Salt before frost and after rain stops (see note C) Salt before frost Salt before snow fall		_	Wet		Dry	
Expected to fall below 1°C Expected rain BEFORE freezing Possible rain Possible hoar frost Expected snow Expected snow Possible fog No hoar frost likely, mon weather should likely likel		No hoar frost		frost		
Expected to fall below 1°C Expected rain BEFORE freezing Salt after rain stops Salt before frost and after rain stops (see note C) DURING freezing Possible rain Possible hoar frost Possible fog Expected snow Salt before frost Monit weath conditions and steel rain Stops (see note C) Salt before frost Salt before snow fall Salt before snow fall		No hoar frost			No action likely, monitor weather	
BEFORE freezing Salt after rain stops Salt after rain stops Salt after rain stops Salt after rain stops Salt before frost and after rain stops (see note C) DURING freezing Possible rain Possible hoar frost Possible fog Expected snow Salt before frost Monit weath condition Salt before snow fall		_				
Expected rain DURING freezing Possible rain Possible hoar frost Possible fog Expected snow Salt before frost Weath condition Salt before snow fall			Salt after rain stops			
Possible rain Possible hoar frost Possible fog Expected snow Salt before frost Monit weath condition Salt before snow fall		-	•			
		Possible rain Possible hoar frost	Sal	t before frost	Monitor weather conditions	
	Expected snow		Salt before snow fall			
Freezing Rain Before rain Salt before rainfall (see note C)	Freezing Rain Before rain Salt before rainfa		efore rainfall (see	note C)		
During rain Salt during rainfall (see note C)		During rain	Salt during rainfall (see note C)			
After rain Salt after rainfall (see note C)		After rain	Salt	after rainfall (see	note C)	

The decision to undertake precautionary treatments should, if appropriate, be adjusted to take account of residual salt and/or surface moisture.

A. Particular attention should be given to any possibility of water running across carriageways and such locations should be monitored and treated as required.

B. When a weather warning contains reference to expected hoar frost considerable deposits of frost are likely to occur and close monitoring will be required. Particular attention should be given to the timing of precautionary treatments due to the possibility that salt deposited on a dry road may be dispersed before it can become effective.

C.Under these circumstances rain will freeze on contact with running surfaces and full pre-treatment should be provided even on dry roads. This is a most serious condition and should be monitored closely and continuously throughout the danger period.

Recommended Spread F Salting	Rates Pred	cautionary
Bradiated Boad Curfoos	ABP Treated	d Salt (6mm)
Predicted Road Surface Temperature (RST)	Dry/Damp Road	Wet Road
At or above -2.0°C	8	10
-2.1°C to -3.0°C	10	15
-3.1°C to -5.0°C	10	20
-5.1°C to -7.0°C	15	2 x 15
-7.1°C to -10.0°C	20	2 x 20
-10.1°C to -15.0°C	2 x 15	3 x 20

2 No treatments required

Note guidance re any appropriate interpolation

12.2.2 On working days (Monday to Friday, excluding Bank Holidays and corporate closedowns) the initial decision(s) on any action(s) required will be made by the Highway Asset Maintenance office, in conjunction with the Highway Duty Officer. The Highway Duty Officer will be responsible for the monitoring of conditions, decision making, and subsequent revisions, after the initial decision and on non-working days.

12.2.3 Initial decisions will normally be made by 13:30 hrs each day for planned action during the period 15:30 to 07:30 hrs.

12.2.4 Decisions on any action required or not as appropriate will be communicated to operational staff and managers by email or other electronic means and advised to adjacent local authority's key contacts and emergency services for information.

12.3. Decision Recording

12.3.1 All decisions, action or no action, shall be recorded on the appropriate forms.

When the road surface temperature (RST) is forecast to be ps. 3 degrees C or lower or snow is forecast, a full record supporting the decision shall be documented.

12.4 Decision Support Systems.

12.4.1 A decision support system and supporting information shall be available to assist the decision maker. This will include all those marked ***and all or some of the remainder.

***Weather forecasts (both	***Surface state	Route based information
24Hr and longer term)	information	
***Temperature graphs	***Records of past action	***Traffic levels guidance
***Target spread rates for	***Vehicles spreading	***Condition of salt
conditions	capability and	stocks
	performance	
***Ice detection	***Weather radar	

12.4.2 Any decision support system(s) or equipment shall be suitably calibrated and maintained in accordance with the manufacturer's recommendations.

12.5 Residual Salt

12.5.1 The decision to salt should include a risk assessment of the probability of ice and hoar frost forming against residual salt levels by considering the following factors:

- time since last salting
- the amount and rate of any rainfall (>2mm/h may wash-off salt)
- surface water from various sources including runoff, absorption, leaks, etc.
- sensor information
- traffic
- wind

Residual salt should not normally be relied on for more than 2 nights, this includes the night the treatment was for— i.e. if other factors are acceptable and there was a treatment on day 1 then it may be possible to not salt on day 2 but day 3 should be treated.

13. Training

13.1 Decision makers

13.1.1. The authority's decision makers will have undertaken initial and subsequent refresher training as required. Training will be sourced from appropriate forecast or training providers including a suitable Winter Decision Makers Course, and mentoring by suitably experienced staff where appropriate.

13.2 Drivers and Supervisors

- 13.2.1 All drivers of council winter service vehicles and winter service supervisors shall be trained to a suitable standard.
- 13.3.2 Other persons involved in winter service provision shall receive training as necessary and appropriate.

13.3 Snow Plough mates

- 13.3.1 Plough mates shall receive instruction and training where necessary on the responsibilities and duties associated with snow ploughing.
- 13.4 Other Winter Service Operatives
 - 13.4.1 Instruction and training shall be given where necessary on their duties and responsibilities.
 - 13.5 Snow Wardens
 - 13.5.1 Any Snow Wardens shall be trained as in 13.4.1 above.

14. Response and Treatment Times

14.1 Response time.

- 14.1.1 This is the period between a decision being taken to begin treatment and loaded vehicles leaving the depot.
- 14.1.2 Where the decision to treat has not been forward planned i.e. during the working day, the realistic target response time is ninety minutes.

14.2 Treatment time.

- 14.2.1 This is the period between the loaded vehicles leaving the depot and the completion of treatment on all priority 1, 2 & 3 routes.
- 14.2.2 The target treatment times for precautionary salting is a maximum of 3½ hours, the average being 2¾ hours. It should be recognised, however, that actual treatment times will vary in different weather and traffic conditions.

14.3 Treatment records.

14.3.1 Supervisors, shall keep records of all treatments and actions electronically, including, but not limited to:-

Instructions received	Treatment start time
Treatment completion time	Action(s) undertaken
Problems encountered/observed	Driver details
Material usage	Duty hours and breaks
Supervisor details	Breakdowns

15. Materials

15.1 Materials

The following may be used

Rock salt to BS 3247-2011 (10mm grade) with or without additive.

Rock salt to BS 3247-2011 (6mm grade) with or without additive.

A De Icing liquid shall be used on footbridges for precautionary and other treatment as appropriate.

Abrasives shall be used as necessary or mixed with rock salt when temperatures necessitate.

15.2 Delivery and Storage

15.2.1

Subject to any external factors a minimum stock of rock salt is to be held as per the table in Section 21.

15.2.2

Stock levels shall be monitored by the Highways Asset Maintenance office over the winter period to ensure adequate supply. Particular attention shall be paid during any increased levels of operation or in advance of significant forecast weather conditions.

15.2.3

All materials shall be stored in an appropriate and safe manner while maintaining optimum condition as far as possible.

Salt being used for precautionary salting shall be tested and checked for moisture content on a regular basis.

The effects of run off and leaching shall be considered and any necessary controls complied with.

16 Spread rates and material usage

16.1 Route design

Taking into account the use of treated salt and guidance from spread rate tables, precautionary treatment routes shall be designed based on a maximum spread rate of 18g/Sqm per single treatment unless re-loading is planned.

16.2 Carriageways

Material usage options.

Material	Precautionary	Pre Snow	Snow / Ice	Post Snow
	(Frost)			
Treated Rock	Yes	Yes	Only if	Yes
salt (6mm)			untreated not	
			available	
Untreated	Only if treated salt	Yes	Yes	Yes
Rock salt.	not available. (and			
(10mm)	to be discussed with			
	maintenance office)			
Abrasives.	N/A	N/A	As	N/A
(6mm)			necessary or	
			mixed with	
			rock salt.	

Determination of spread rates shall be based on the appropriate tables from the latest issued guidance from the NWSRG as referred to in the document 'Well managed highway infrastructure', as well as the recommendations covered in 12.2.1.

The above includes cycleways which run alongside the carriageway at the same level.

16.3 Footways and Subways

Material	Precautionary	Pre Snow	Snow / Ice	Post Snow
	(Frost)			
Rock salt	Yes	Yes	Yes	Yes
(Untreated)				
Rock Salt	Yes	N/A	N/A	Yes
(Treated)				
Additional	N/A	N/A	As necessary	N/A
Abrasives			or mixed with	
			rock salt.	
Liquid De-Icer	Yes	Yes	Yes	N/A

The above includes cycleways which run alongside the footway at the same level.

16.4 Footbridges

Footbridges	Footbridges Precautionary		Snow / Ice
	(Frost)		
Liquid De Icer	Y	Y	Y
Treated Rock salt	reated Rock salt Y		Y

16.5 Salt Bins

Salt Bins
Untreated Rock salt
(10mm)

16.6 Effectiveness of Salt

16.6.1 Low temperatures

It should be noted that rock salt starts to become less effective when the temperature falls below minus 5° C and below minus 11° C salt becomes virtually ineffective.

16.6.2 Low humidity

Where conditions with Low Humidity occur consideration should be given to additional later treatments.

16.7 Materials for Severe Conditions

During severe or prolonged conditions sand, grit etc. (which acts as an abrasive) may be used to augment supplies and assists in the breakdown of any ice that may have formed.

A De Icing liquid with additives may be used for treatment as appropriate.

17. Publicity and Public Contact points

17.1 Publicity

Information on the winter service provision shall be made available to the public via press releases and the Doncaster Council website. Social media may also be used to advise once treatments are complete and when other activities such as snowploughing are in progress.

17.2 Contact.

Enquiries to the council may be made via the Council contact centre on 01302 736000.

18. Works for outside bodies / other departments.

- 18.1 Works will only be undertaken for other council departments if resources are available and they are not required for works on the public highway. Any agreed works to be carried out would only be done on a fully rechargeable basis.
- 18.2 Works for external or private bodies will not normally be undertaken.
- 18.3 Reciprocal arrangements with adjacent local authorities will be put in place where both parties agree and such arrangements have a beneficial outcome with regards to efficiencies and network continuity provision.

19. Definition of terms.

For the purposes of the provision of the winter service, the following terms are used: -

- 1. Carriageway network definitions.
 - a Strategic Routes Those as defined nationally.
 - b Primary Route Network (PRN) Principal 'A' class Roads linking between primary destinations
 - Precautionary Salting Network The network defined to receive treatment on a precautionary basis.
 - d Secondary Route Network The carriageway network defined for treatment in severe weather.

2. Main Bus Route

A road with bus stops on it as advised to Doncaster Council by SYMCA.

3. Main Traffic Links

Roads that link residential / industrial areas to the precautionary salting network.

4. Urban Roads

Roads subject to a 40mph or lower speed limit

5. Rural Roads

Roads subject to speed limit in excess of 40mph

6. Highway

Defined as the adopted carriageway, footway, pedestrianised area or cycleway for which the City of Doncaster Council is the maintaining Highway Authority

7. Normal Working Day

Deemed to be the period between 07:30 and 15:30 Monday to Thursday (15:00 Friday)

8. Frosts

- a Extended Frost Where a visible hoar frost (not snow or ice) is present for more than 24 hrs with a forecast for road surface temperatures not to rise above zero for a further 24 hrs.
- b Daytime Frost Where a visible frost is present and forecast to be
 present past 12:00 hrs
- C Overnight Frost Where a visible frost is forecast / occurs overnight but
 is not forecast beyond 12:00 hrs

9. Normal Conditions

Road and weather conditions that might normally be expected during the winter period. (this includes frosts, rain, winds, light snow etc.)

10. Severe Weather

Defined as 'widespread ice or snow (not frost) is present on the network for more than 24 hrs with a forecast for road surface temperatures not to rise above zero for a further 24 hrs.

11. Extreme Conditions

When factors outside the control of the authority affect the ability of the authority to deliver its pre-determined policy in normal winter conditions or weather conditions themselves are declared as such.

20. Action during extreme conditions

Where due to circumstances outside of the control of the Authority it is recognised that continuing action in accordance with the pre-determined policy cannot be maintained, treatment shall be reviewed and tailored in discussion with senior management.

This will be based on available resources, network priorities, current weather and forecast conditions.

21. Resilience - Salt stocks

In endeavouring to ensure adequate provision has been made throughout the service in respect of resilience the following should be considered as 'necessary'.

Resilience stock levels recommended are as shown in the table below.

Precautionary network Treatment:

	Days	Runs /day	Spread rate	Tonnes / run	Total
		(No)	(g)		(Tonnes)
1st marginal period	6	4	20	80	1920
1 st low period	8	4	20	80	2560
High period	12	4	20	80	3840
2 nd low period	8	4	20	80	2560
2nd marginal period	6	4	20	80	1920

This stock will be made up as shown in the table below.

Depot	Measured date	Protection	6mm	10mm	Total
			Thawrox +	Thawrox	(Tonnes)
North Bridge					
Barn	April 2025	Barn	2353	N/A	
East Side (1) (Area					
2 - adj Access rd.)					
2023 stock	April 2025	Sheeted	N/A	1447	
East Side (2) (Area					
2 - adj M/way)					
2023 stock	April 2025	Sheeted	N/A	769	
East Side (3) (Area					
1 - adj to gate)					
2024 stock	April 2025	Sheeted	N/A	1322	
In Stock	September 2025		2353	3538	5891
On Order	N/A		0	0	0
Total-at start of			2353	3538	5891
winter					

Fuel stocks

Doncaster Council Transport Services manage available fuel stock.

Fuel stocks are held at North Bridge Depot as below.

Fuel	Max (Litres)	Re Order level
		(Litres)
Diesel	72,000	25,000

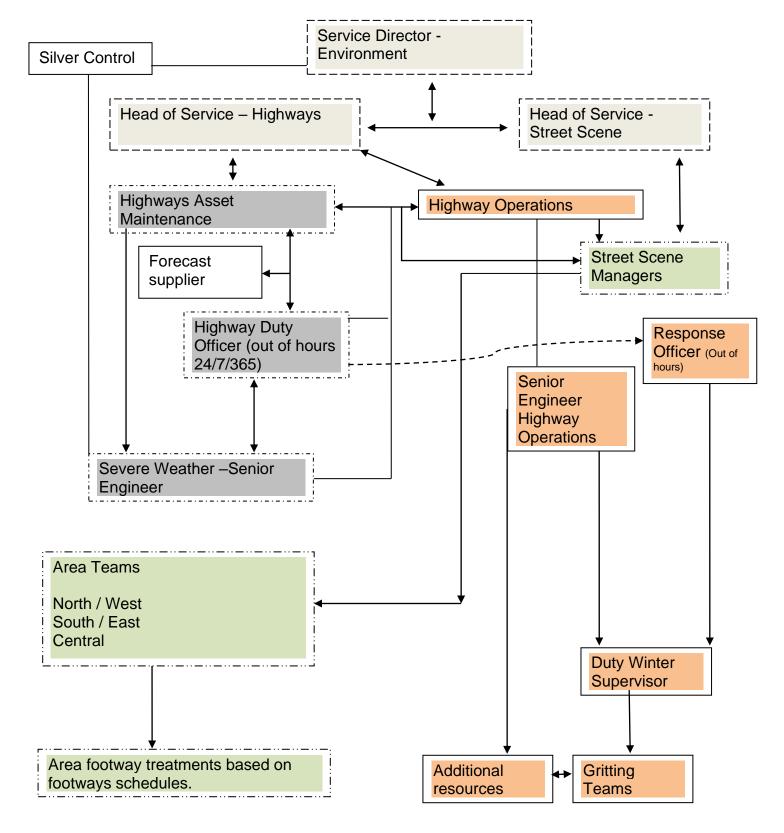
Highways operations supervisors also have access to fuel cards should they be needed.

Staffing

Plans shall be in place to be able to roster for 24Hr working single staffing or double staffing operations during the appropriate periods and taking into account driving and duty hrs legislation etc.

22. Command and Control Structure.

The command and control structure for winter service shall be as below:-



23 Winter Service Implementation - Functions and Activities.

Policy	Highways	Highway	Street	Transport	Duty
	Asset	Operations	Scene		Officer
	Maintenance				
	Policy	Operating the	Operating	Operating	Operating
	preparation and	policy	the policy	the policy	the policy
	operation				
	Approval of				
	policy				
	Additions/				
	deletions to				
	salting network				
	Prec. Route				
	planning				
	Standards				
	Secondary				
	route listings.				
	Footway		Input to		
	treatment		footway		
	schedules		schedules		
General					
implementation					
	Forecast and	Duty rota-	Record	Plough	Duty
	other	drivers and	keeping	maintenance	Officer
	information	supervisors			rota
	provision				
	Necessary	Vehicle Checks		Vehicle	
	training			maintenance	
	Route maps	Necessary		Fuel stocks	
		training			
	Salt stocks &	Vehicle		Gritter	
	monitoring	communications		calibration	
	Record keeping	Record keeping		Duty fitters	
	Snow plough				
	contractors				
			l		

General implementation	Highways Asset Maintenance	Highway Operations	Street Scene	Transport	Duty Officer
	Dedicated plant	Vehicle		Loading	
	acquisition/	monitoring		shovel	
	specification	mormormig		maintenance.	
	Information and	Risk		Dedicated	
	publicity /	assessments		plant	
	liaison			acquisition.	
	Vehicle	Vehicle		Record	
	Telematics	Telematics		keeping	
				Vehicle	
				telematics	
Operation -	Highways	Highway	Street	Transport	Duty
Precautionary	Asset	Operations	Scene		Officer
salting	Maintenance				
	Forecast	Salting	Treat	Vehicle	Forecast
	monitoring	operations	footways	repair	Monitoring
			as		
			instructed		
	Decision	Record keeping	Record	Record	Decision
	making		keeping	keeping	Making
	Public	Monitoring			
	information /	vehicles and			
	Liaison	actions			
	Invoking	Out of hours			
	secondary route	response officer			
	treatments	and supervisor.			
	Record keeping				
	Network				
	Monitoring				

Operation -	Highways	Highway	Street	Transport	Duty
Snow clearing	Asset	Operations	Scene		Officer
	Maintenance				
	Forecast	Additional	Area	Vehicle	Forecast
	monitoring	manning for	teams	repair /	monitoring
		ploughs	footways	maintenance	
			clearing		
			and		
			treatment		
	Decision	Shift / rota	Record	Plough fitting	Decision
	making	working	keeping		making
	Snow clearing	Record keeping		Record	Invoking /
	procedures			keeping	instructing
	carriageway				Pr 4 and
	and footway				other route
	Public	Monitoring			treatments
	information	vehicles and			
	Illioimation	actions.			
	Invoking /	Organisation,			
	instructing Pr 4	Instruction and			
	and other route	Supervision of			
	treatments	additional			
		contractors.			
	Network	COITHACIOIS.			
	Monitoring				
	Worldoning				

24. Standard Operating Procedure.

24.1 Normal Conditions

During normal conditions winter service operational decisions will be made on a daily basis via the Highways Asset Maintenance office / Duty Officer.

24.2 Escalation

24.2.1 The Highways Asset Maintenance office and highways duty officer will monitor weather forecasts and conditions throughout the period and be aware of any significant events that may be forecast. Any potential identified issues shall be brought to the attention of the Highways Head of Service.

24.2.2 Where a need for resources and or action outside of normal winter conditions is identified, then Highway Operations shall be advised as soon as possible.

24.2.3 In the event of severe weather conditions, information will be provided to the Service Director (Environment) and arrangements made for such publicity as may be necessary to advise the public of operations being / to be undertaken.

APPENDIX A1 – Circulation List

CIRCULATION LIST

	Method & N°	
City of Doncaster Council	(E)lectronic / (P)rinted	
Mayor	(E1)	
Executive Director of Place	(E1)	
Portfolio Holder	(E1)	
Members Library	(P1)	
Transport Manager	(E1)	
Service Director for Environment	(E1)	
Network Manager	(E1)	
Emergency Planning	(E1)	
Highways Operations	(E1)	
Head of Service –Highways	(E1)	
Head of Service - Street Scene	(E1)	
Adjacent Authorities		
Barnsley MBC	(E1)	
East Riding of Yorkshire Council	(E1)	
North Yorkshire Council.	(E1)	
Nottinghamshire C.C.	(E1)	
Rotherham MBC	(E1)	
Wakefield MBC	(E1)	
National Highways	(E1)	
North Lincolnshire Council	(E1)	
Other Organisations		
South Yorkshire Mayoral Combined Authority	(E1)	
South Yorkshire Police	(E1)	
South Yorkshire Fire Service	(E1)	
Yorkshire Ambulance Service	(E1)	

APPENDIX A2 – Priority 1 Network

Winter Service Priority 1 Network

Road	<u>Description</u>	Route
A18	A630 Balby → North Lincs Boundary	2 + 3 + 9 + 10
A19	A630 → North Yorks. Boundary	1 + 8
A631	Notts. Boundary \rightarrow Rotherham Boundary	3 + 5
A635	A638 → Barnsley Boundary	7
A6023	A630 → Rotherham Boundary	6
A6182	$A18 \rightarrow M18 \rightarrow A638$	4
A60 (Part)	(Through Tickhill)	5
A630	Rotherham Boundary → M18	6 + 9 + 10
A638 (N+S)	Notts. Boundary → Wakefield Boundary	4 + 8 + 9

PLAN SHOWING PRIORITY 1 NETWORK

