



## **Winter Maintenance Plan**

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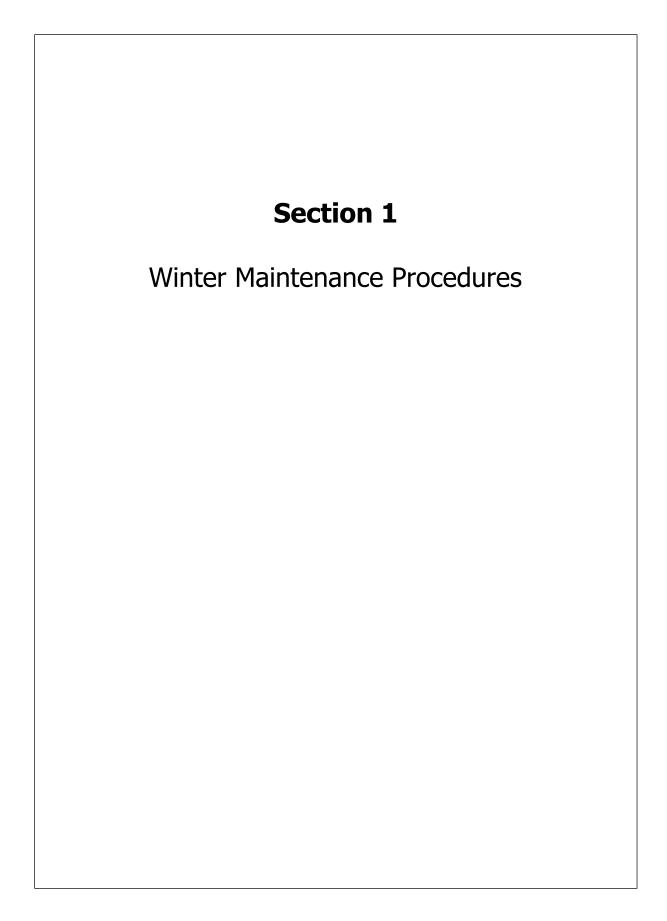
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## Section 1

## Winter Maintenance Procedures

#### Preamble

Winter Maintenance operations within Lincolnshire are also undertaken within a national legal context which also takes into account National Guidance and Best Practice. Extracted below are some relevant sections from "Well-managed Highway Infrastructure: A Code of Practice" published October 2016.

## **B.2.3. WINTER SERVICE**

B.2.3.1. The statutory basis for Winter Service in England and Wales is addressed through Section 41 (1A) of the Highways Act on the 31st October 2003, by Section 111 of the Railways and Safety Transport Act 2003. The first part of Section 41(1) reads:

a) 'The authority who are for the time being the highway authority for a highway maintainable at the public expense are under a duty, subject to subsections (2) and (4) below, to maintain the highway.

b) (1) In particular, a highway authority are under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice'.

B.2.3.2. Section 150 of the Highways Act 1980 also 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*'.

B.2.3.3. In addition, the Traffic Management Act 2004 placed a network management duty on all local traffic authorities in England. It requires authorities to do all that is reasonably practicable to manage the network effectively to keep traffic moving. In meeting the duty, authorities should establish contingency plans for dealing promptly and effectively with unplanned events, such as unforeseen weather conditions, as far as is reasonably practicable.

B.2.3.4. Given the scale of financial and other resources involved in delivering the Winter Service it is not considered reasonable either to:

□provide the service on all parts of the Network;

Densure carriageways, footways and cycle routes are kept free of ice or snow at all times, even on the treated parts of the network.

## **SECTION B.7. WINTER SERVICE**

## **B.7.1. INTRODUCTION**

## Background

B.7.1.1. Although sometimes termed "Winter Maintenance", the particular network management requirements during winter are not "maintenance", in the traditional sense, but specialist operational services. The term "Winter Service" has been adopted by this Code.

B.7.1.2. Winter Service deals with regular, frequent and reasonably predictable occurrences like low temperatures, ice and snow, as well as with exceptional events. Whilst the effects of climate change are likely to result in an increased frequency and intensity of severe winter events, these can be taken into account in Winter Service planning. Therefore Winter Service can and should be subject to the same regime of plan, deliver, review and improve as other aspects of the highway maintenance regime.

Policies and plans developed for Winter Service are likely to have relevance in emergency planning for dealing with extreme weather conditions including flooding, high winds and high temperature. The incidences of such events may be affected by climate change. They are also likely to have some relevance to the wide range of non-weather related emergencies that could affect the highway network.

B.7.1.3. Although a very specialised area, Winter Service is a significant aspect of network management both financially and in terms of its perceived importance to users. It can also have significant environmental effects. The organisation of the service is likely to have considerable implications for the overall procurement and management of other highway maintenance services. This Section of the Code should therefore be read in conjunction with other sections dealing with these issues

B.7.1.4. This section of the Code provides the background and higher level policy aspects of the Winter Service. Guidance relating to practical issues and the delivery of the Winter Service is contained within the National Winter Service Research Group (NWSRG) Practical Guide for Winter Service. Authorities may wish to consider the content of the NWSRG Practical Guide in conjunction with the

information contained within this section of the Code.

link to NWSRG Practical Guide

## Objectives

B.7.1.5. Winter Service can contribute significantly to each of the core objectives set out in this Code as described below:

## Customer

B.7.1.6. There are, in all parts of the UK, very considerable user needs and expectations and these can be a major influence on customer satisfaction through demonstrating an efficient, effective and proportionate response to winter conditions.

## Safety

B.7.1.7. Safety is a consideration for Winter Service, even though statutory obligations and users' needs vary in different parts of the UK.

## Serviceability

B.7.1.8. Maintaining availability and reliability of the highway network is a key objective for Winter Service and one where user judgements of performance will be immediate rather than longer term.

## Sustainability

B.7.1.9. Low temperatures and the formation of ice can cause serious damage to the fabric of carriageways, footways and cycle routes and accelerated damage of the network. Effective Winter Service can contribute to a reduction in whole life costs and minimise damage to the environment.

## **B.7.2. WINTER SERVICE POLICY**

B.7.2.1. Authorities should formally approve and adopt policies and priorities for Winter Service, which are coherent with wider objectives for transport, integration, accessibility and network management, including strategies for public transport, walking and cycling. They should also take into account the wider strategic objectives of the authority.

B.7.2.2. Issues for consideration in developing policy should include:

Dnetwork resilience;

Etreatment of facilities for public transport users;

□treatment of facilities for road users;

Etreatment of facilities for walking and cycling;

□treatment of transport interchanges;

Etreatment of promoted facilities such as community or leisure centres;

□extent of priority for emergency services;

Extent of priority for key public services and critical infrastructure;

Extent of priority for vulnerable users;

□resilience of winter service resources

□other local circumstances.

## **B.7.3. RESILIENT WINTER SERVICE**

### **Minimum Winter Network**

B.7.3.3. As part of their contingency planning, authorities should define a minimum winter network. This network is likely to have a close relationship to the resilient network, see Section A.6, and may be a subset of their normal treatment network.

Note – Due to its geographical size and diversity Lincolnshire does not have a fixed minimum winter network. Historically a dynamic assessment has been employed as severe winter weather tends to affect only certain parts of the county at once and not the whole network.

## 1 Introduction to Lincolnshire Operations

- 1.1 A Highway Maintenance Plan is produced and updated regularly. This plan sets out standards, policy and objectives for the highway network. The Winter Maintenance Plan is a supplement to the Highway Asset Management Plan
- 1.2 Lincolnshire County Council (LCC) carries out precautionary and snow clearance treatments on carriageways and footways in accordance with this approved policy across the County.
- 1.3 All Trunk Road treatment is carried out by Highways England. The Trunk road network includes the A1, A52 west of Grantham, and A46 County Boundary to Carholme Road Roundabout Lincoln.
- 1.4 There are eight operational depots in the County. The operational depots

are located at Sturton by Stow, Willingham Hall, Manby, Horncastle, Ancaster, Thurlby, Chainbridge and Pode Hole with strategic salt stored on quayside locally.. The Salt specification is for 6 mm high purity marine salt at all depots, to enable pre-wet operations.

- 1.5 All operations are carried out taking regard of National Guidance and Best Practice contained within the following documents:
  - Section B.7. Winter Service of Well-managed Highway Infrastructure: A Code of Practice
  - NWSRG Practical Guide for Winter Service

HM21: Priority Route Network. Winter Maintenance operations will give priority to a 3,008 KM network of priority routes which have taken into account historical treatment regimes and public awareness. This network is defined as:

**1. 1,200 KM Lincolnshire Strategic Road Network which includes the A and B road network.** 

2 Links to all the County's main villages as defined in <u>Appendix</u> <u>WMP/2/HM21-1</u>).

**3.** That where physically possible, a treated link is provided to within at least 500 metres of all primary and secondary schools.

4. That all main NHS hospital are linked to the treated network.

5. That all railway and bus station are linked to the treated network.

6. That the incorporation of certain combined public service/school bus routes into the priority network be considered. However their inclusion be based upon criteria taking into account historical accident data, pupil numbers and geographical risk factors. It should be noted that all public service/school bus drivers are professional PSV drivers trained to drive in winter weather conditions.

All treatments to be carried out using appropriate action for the prevailing conditions in accordance with national guidance and best practice.

Winter maintenance operations comprise precautionary salting and snow clearance. It is not realistic to treat the entire county's 8,960 km road network and first call on resources is given to a 3,008 km network of priority routes.

That all future requests for roads to be included into the priority network are evaluated against the above criteria. Requests will be considered before the winter maintenance season and will be prioritised on the scoring system as detailed in HM31. Where ever practicable there will be continuity with cross border routes.

Roads not on the Priority Route Network and footways are not normally treated on a precautionary basis. The exception being at times of Severe or Extreme forecasts of snow as defined in HM22. In this case precautionary treatment may be carried out if available resources allow. HM22: For winter maintenance policies the definition of Severe Winter Weather and Extreme Winter Weather is as follows:

Severe Winter Weather is defined as persistent widespread ice (rather than frost) or snow for more than 18 hours in a 24 hour period and a forecast not to rise above zero for a further 18 hours in the next 24 hours. Or a forecast, with a high confidence of significant snowfall resulting in accumulations of 5 cm or more or where drifting is expected and conditions are forecast to persist for at least 24 hours.

Extreme Winter Weather is defined as a period of widespread prolonged snow, following a period of Severe Winter Weather, of sufficient depth to cause disruption to both the treated and non treated highway network. It is expected that during a period of Extreme Winter Weather there will not be sufficient resources available to treat either the severe weather route network or the footway networks. The Executive Director for Environment and Economy as a Category 1 Responder will declare an Emergency under the Civil Contingencies Act 2004 and call for the setting up a Strategic (Gold) Co-ordination Group – see HM36 for further details.

The definitions of Severe and Extreme weather in a winter maintenance context seeks to ensure consistency and define a standard when the public can expect the treatment of severe weather routes and footways to commence. HM23: At times of Severe Winter Weather or Extreme Winter Weather as defined in HM22 treatment priorities will be as follows:

1: Carriageways on the approved 3,008 km Priority Route Network as defined in HM21.

**2:** Carriageways on the Severe Weather Route Network as defined in HM35.

3: Footways in accordance with <u>HM24</u>.

When dealing with snow bound or compacted ice on carriageways treatments employing a mixture of salt and grit/sharp sand should be treatment of first choice. In times of extremis and to aid traction grit on its own should be considered for routes not on the Priority Route Network and the footway network.

Variations in the above priorities may be necessary to suit local conditions and the efficient planning of treatment routes. Liaison between Divisions will be undertaken prior to treatment of the Severe weather routes to ensure a consistent standard of service with adjacent areas when dealing with severe frost.

Remedial treatment decisions are based on the above priorities and knowledge of local conditions.

HM24: During periods of Severe or Extreme Winter Weather the treatment of footways will be considered when resources permit in accordance with <u>Appendix WMP/2/HM24-1</u> as a minimum standard. Footways to be treated will reflect their importance in the County's footway hierarchy. The footway priority network for winter maintenance operations in descending order of importance consists of:

- 1. Each Division will keep a list of footways in and around Transport Interchanges, including footways to main car parks, designated Hierarchy 1a. The designation 1a will be for winter maintenance purposes only.
- 2. Hierarchy 1 and 2 footways.
- 3. Hierarchy 3 footways with gradients greater than 1 in 10 longitudinally for longer than 50 metres.
- 4. Other Hierarchy 3 footways.
- 5. Hierarchy 4 footways

When a period of Severe or Extreme Winter Weather, as defined in HM22, is experienced or forecast consideration will be given to treating hierarch 1a footways prior to the onset of the these conditions.

Lincolnshire County Council has adopted the *Midlands Service Improvement Group (Winter Maintenance) – Winter Service for Footways and Cycleways – Treatment Table* as the winter service standard for footways and cycleways.

See Appendix WMP/2/HM24-1

HM25: A system of local weather stations will be operated and used both to feed into the weather forecast model and to monitor local conditions. A professional forecasting service will be used to guide treatment decisions.

The County Council has installed twelve remote weather stations at sites which cover the different climatic zones within Lincolnshire which are used for forecasting and monitoring purposes. Information from these sites is supplemented by information from adjacent sites on the Highways England network and in other Counties and fed into the weather forecast model. It is also used to check on temperature (air and road), humidity and wind speed. The sites enable both improved local forecasts to be obtained and actual conditions monitored. All the information can be accessed locally using a portable computer and modem. HM26: During the winter maintenance period of 1<sup>st</sup> October to 30<sup>th</sup> April suitably trained senior Lincolnshire County Council staff (Duty Officers) will monitor weather forecasts and weather conditions on a 24 hour a day basis. This will enable treatment decisions to be tuned to changing winter weather conditions. The duty officer is authorised to make certain winter maintenance treatment decisions as detailed below.

During the normal working day there will be two Duty Officers on duty across the county, on a weekly rota system, who are authorised to make precautionary salting treatment decisions. In addition the Divisional Duty Officer will control all footway and severe weather route network treatment and during times of snow will operate the Divisional Snow Room. The Divisional Duty Officer will also be available for consultation at all times.

At all other times winter maintenance operations will be monitored and controlled by the Highways Out of Hours Emergency Service. The Out of Hours Duty Officers are authorised to make precautionary salting treatment decisions only. They will consult with the Divisional Duty Officer to maintain a local input to all actions.

All Staff making winter maintenance decisions shall be suitably trained. Competence is demonstrated by the following:

- **1.** Completion of the Met Office Road Weather Training Course
- 2. Completion of the Vaisala Winter Weather Scenario Training
- 3. Within a five year period completion of one of either the above courses as a refresher.

Guidance on the decision making process is contained within flowcharts contained within Section 1 paragraph 15. These decision making flowcharts are regularly updated to reflect best national guidance and practice. HM27: The response required from the Highway Works Term Contractor on the Priority Route Network when an urgent precautionary salting call-out is notified is:

- Spreaders to be loaded and depart from operational bases within1 hour.
- All routes to be treated within four hours of spreaders leaving the depot.

Initial decisions are to be notified to the Highway Works Term Contractor by 12.00 noon every day.

Where possible, longer notice is given to the contractor of the time when treatment is to be started. The winter maintenance contract includes for a 1 hour response time. The treatment time for all routes is less than 3 hours. HM28: Salt/Grit bins will be provided and maintained on request if the location meets criteria set out in HM34 and a responsible body undertakes to:

- 1. Spread salt/grit when necessary and
- 2. Inform the local highways office when it needs refilling

Salt/Grit bins shall only be filled with a 50/50 mixture of salt and grit/sharp sand.

These bins are provided on a self help basis to local communities to treat known local trouble spots on the public highway not covered by the Priority Route Network. In rural areas it is generally the parish council which requests and accepts responsibility for a bin or bins. In urban areas such as Lincoln City examples of responsible bodies with a nominated individual as contact can mean:

- City Centre/Town Wardens
- School caretakers
- Care home/sheltered accommodation wardens
- Group of shops
- Fire/ambulance stations
- District Councils/Town Councils
- Group of residents with a nominated contact.

Salt/Grit bins will not be provided at sites which are prone to vandalism or other damage or where they have waste put in them.

HM29: The Budget for winter maintenance will be based on expenditure in an average winter with annual fluctuations catered for by the Adverse Weather Reserve Fund. An average winter is defined as 85 precautionary salting runs and 2 days of continuous ploughing and salting to deal with snow.

Winter maintenance expenditure in any single financial year is subject to the vagaries of the winter weather. Hence there can be large unpredictable fluctuations between years. The normal practice has been that in a Severe/Extreme Winter for the excess expenditure over the budget to be financed from the reserve fund and in a mild winter the savings used to replenish the reserve.

HM30: To ensure it has sufficient resources for its winter maintenance operations the County Council will provide as a minimum:

- 43 Front line pre-wet spreaders, which are:
  - 37 x 9m<sup>3</sup>
  - **3 x 4m³**
  - 3 x 2m<sup>3</sup>
- 4 spare pre-wet 9m<sup>3</sup> gritters spread geographically across the county
- 1 demountable gritter at Manby depot (spare for small main line gritter)
- 3 snow blower attachments (2 life expired attachments are mothballed)
- 47 snow ploughs
- 8 Operational centres at which spreaders and salt supplies will be based
- 2 dedicated footway attachments for the Lincoln Area.
- At the start of each winter season there will be 35,000 tonnes of salt in stock or available quayside.

The above resources will not always be needed but are the minimum deemed necessary to provide a reasonable level of service in all but the most severe conditions. At such times extra resources, including plant and labour, are hired in as necessary and as available. Before the start of each winter season agreements are made with local farmers, hauliers and other contractors on such matters as plant and labour availability and hire rates. HM31: Requests for additions to the Priority Route Network. All requests will be considered and rated against a set of objective criteria with the assistance of a Network Evaluation form. The findings will be summarised and a report presented to the Executive Councillor for Highways. This will be completed out of season as detailed in <u>Appendix WMP/2/HM31-1</u>

HM32: Cross border treatment arrangements.

The County Council will enter into cross border agreements to maximise efficiency and consistency of treatment with adjacent authorities on reciprocal treatment arrangements on certain roads. Where this occurs each authority will treat the section of road concerned in accordance with their authorities Winter Maintenance Policy and in agreement with an exchange of letters under Section 8 of the Highways Act 1980. <u>Appendix WMP/16/1</u> contains a draft letter and list of agreed cross boundary routes.

HM33 The County Council will not erect any additional permanent "Road not gritted" signs on the network

Existing signs on the network will continue to be maintained.

HM34: Evaluation for additional Salt/Grit Bins requests will be carried out before each winter season.

All requests will be considered and rated against a set of objective criteria with the assistance of Grit Bin Evaluation form. The findings will be summarised and a report presented to the Executive Councillor for Highways. This will be completed out of season as detailed in <u>Appendix WMP/2/HM34-1</u>

HM35: Only during periods of Severe or Extreme Winter Weather will the treatment of Severe Weather Routes be considered when resources permit. The Severe Weather Route Network for winter maintenance operations consists of carriageways leading to:

- 1. essential industrial and military establishments
- 2. hospitals and health centres
- 3. schools and colleges
- 4. ambulance and fire stations
- 5. important bus and commuter routes.
- 6. communities not covered by the priority route network.

Each Division will prepare a network of severe weather highway routes reflecting the above policy and will treat in whole or in part according to prevailing conditions. For reasons of safety, normally roads on the severe weather route network will only be treated during the hours of daylight.

HM36: Mutual Aid arrangements shall be prepared, where possible, with all other category 1 responders as defined under the Civil Contingencies Act 2004. These will come into operation during periods of Extreme Winter Weather as defined in HM22.

An agreement in principle has been reached with the local NHS Trust to maintain access to all critical hospital sites within the county, which include:

- Lincoln County Hospital
- Grantham Hospital
- Pilgrim Hospital Boston
- John Coupland Hospital Gainsbrough
- Louth Hospital
- Skegness Hospital
- Johnson Hospital Spalding.

The main access route into and through all of the above establishments, will be maintained by a main line gritter during this period, if the local NHS Trust resources cannot cope. Salt may also be provided to enable the footways within the hospital to be treated, with the NHS utilising its resources to maintain access on adjacent public highway footways. The above is subject to resource constraints at the time.

## 3. Responsibilities

Assets, Resources and Network Management	Highways Client Services	Local Highway Divisions	Highways Works Term Contractor	Fleet Operator
Policy	Policy	Implementation of policy		
Standards and Planning	Standards Planning of routes Approve additions to the salting network Snow route planning Routing to meet Audit Commission targets Driver training	Planning – input of local knowledge Severe Weather route planning Footway salting planning Recommendations for route additions	Planning – input of local knowledge Providing all available resources in emergency conditions	Maintenance of Fleet to appropriate standards as specified in Fleet Contract Providing all available resources in emergency conditions
Winter Maintenance Plan	Staff proceduresStaff responsibilityPrimary Route MapsCalibration processSnow clearing proceduresSalt stocksWeather forecast and information proceduresOrganisational chartsLocation of fleetSalt testing arrangementsSalt supply contractsInformation and publicityTraining procedures	Duty Rota Severe Weather route maps Footway salting procedures Salt bin procedures List of ploughing contractors Depot maintenance Weekly gritter checks Winter maintenance yearly rally	Driver Rota Plant and vehicle manning arrangements Fuel stocks Loading arrangements Vehicle communications	Allocation of vehicles Fleet inventory – including License requirements Garaging, services and maintenance arrangements
Operation — Precautionary Salting	Out of Hours Staff Weather Forecasting	Monitoring of weather forecast during working hours	Preparing Gritters in under 1 hour ready for run	Provide a Rota of Duty Fitters

	<ul> <li>and Monitoring</li> <li>Monitoring Fleet movements</li> <li>Associate equipment and software</li> <li>Maintenance of brine equipment.</li> <li>Let neighbouring authorities know of decision</li> </ul>	Decision making Inform contractor and HQ staff about decision	Calling in drivers Loading gritters Completing run in under 4 hours Refilling of brine equipment	
Operations – Severe Weather Routes	As above	Inform contractor of decision to run Severe Weather Routes.	As above	As above
Operations – Snow Clearance	Open Snow Room if weather deteriorates OHDO's to be double manned Liaise with Police and Public Liaise with all Divisions involved Inform the media	Contact fleet provider about forecast. Contacts HWTC about fitting ploughs and extra staff Contact ploughing contractors Liaise with local snow control and report network conditions Arrange footway clearance Post snow inspection Open office 24 hours	Fit ploughs Additional staff ready to deal with snow Arrange staff into gangs for footway clearance Contractors to put staff in divisional Office for 24 hour operation	Prepare snow- blowers Fitters on standby

### 4. Decision Making Process

- 4.1 The Divisional Duty Officer is in receipt of winter weather forecasts by approximately 1100 hours daily and an instruction relating to precautionary salting normally will be passed to the Contractor by 1200 hours on the same day. The instruction will be passed using the Vaisala 'Manager' system (the Authorities computerised winter maintenance recording system). Out of Hours staff will be responsible for decisions during any other time. The decision relating to salting may take one of several forms:
  - A Confirmed salting of all or specified routes where drivers and operators are to be given details of timings, salt loads and rate of spread.
  - B Confirmed stand-by for a possible requirement for salting of all or specified routes where drivers are to report to the operational centre and to be immediately available to perform duties as required by the engineer.
  - C No action at present but drivers to remain available to go if required over the next 24 hours.
  - D Precautionary salting is unlikely to be required over the next 24 hours.
- 4.2 Duty Officers will liaise with each other utilising a telephone conferencing system such as the Arkadin System as detailed in the Winter Maintenance Duty Officers Conference Call Protocol. (Appendix WMP/4/1). Where ever possible Divisions should have a common treatment and start time.
- 4.3 Response Times –

This is defined as the period between issuing instructions to carry out salting and the vehicles are loaded, manned and ready to leave the operating centre. On all salting operations, the response time shall not exceed one hour unless approved by the Duty Officer regardless of the time of day or night that the instruction is given. The Highway Works Term Contractor shall ensure that all manpower engaged upon these operations can achieve this specified response time.

4.4 Stand-by-

Stand-by is a requirement for drivers and operatives to report at a specified time to the operational centre in readiness to carry out winter maintenance operations. This item will also apply in the event of a precautionary salting run abandoned before vehicles have left the operational centre.

- 4.5 Decisions will only be made by members of staff who comply with HM26.
- 4.6 Decisions will be made using the <u>Precautionary Salting Flow Chart</u> and will also take into account other factors including:
  - Any expected residual salt level based on professional experience and utilising the Grip Factor readings from the roadside weather

station system.

- Professional guidance from the Forecast Provider.
- Decision to treat only part of the priority network in marginal weather conditions can be taken utilising Route Based Forecasts from the Met Office.
- 4.7 It is acknowledged, that on occasions, part(s) of the priority gritting network may experience localised isolated or limited extents of ice/hoar frost, such as bridge decks. This is due to local meteorological conditions. In these circumstances no treatment will take place. It is the primary responsibility of the motorist to take care of their own safety.

#### 5. Salt, Salt Storage and Brine Facilities

- 5.1 Where possible all salt stocks will be kept under cover in salt barns. Where this is not possible, all external salt stocks will be kept covered using the DryStore system or similar.
- 5.2 All salt and brine will be regularly tested for compliance with standards the LincsLab.
- 5.3 Ordinarily salt stocks shall be maintained to ensure a minimum of 15,000 tonnes is available at any one time across the county. This may be altered in accordance with any national standards/practices that may be developed for nationwide snow conditions.
- 5.4

Brine making facilities are provided at Sturton by Stow, Willingham Hall, Manby, Thurlby, Ancaster, Chainbridge and Pode Hole depots. Brine is imported at Horncastle depot from Omex at Bardney. All brine is made to a nominal 23% saturation. Brine at Ancaster and Thurlby additionally has a 10% mixture of an Agricultural Bi-product (Safecote) added. This ABP ensures that the treatment action lasts longer on the carriageway, depresses the freezing action of salt below -7 degrees centigrade and reduces treatment spread rates.

5.5 Salt utilised for all operations shall be high purity 6mm marine or rock salt. Preference should be given to 6mm marine salt due to its consistent particle size which gives a consistent spread rates and distribution profile across the carriageway. Marine salt also eases the calibration process of the gritter fleet and provides consistent settings across the county.

#### 6 Precautionary Salting

- 6.1 Roads off the Priority Route Network are not normally treated on a precautionary basis. They may only be treated due to localised factor such as a burst water main or standing water due to field runoff.
- 6.2 Precautionary salting may also be carried out on Severe Weather routes

when prolonged low temperatures, with attendant risk of icy roads, or persistent frosts occur in accordance with HM23 and HM35.

- 6.3 43 dedicated front-line gritters shall be utilised for precautionary salting by the Divisions.
- 6.4 5 second line gritters shall be utilised as back-ups to front line gritters, at least one in each Divisional area.
- 6.5 Treatment time shall be a maximum of 3 hours
- 6.6 Any precautionary salting route not completed when road temperatures rise above plus 1 degree Celsius will be reviewed by the Out of Hours Officer and a decision made whether or not to stop salting.
- 6.7 Highways Client Services (including the OHDO) and Highways Divisional staff will have access to Vaisala internet monitoring system and Forecast Providers weather forecast service.
- 6.8 In the event of uncertain weather forecasts, decisions should be weighted in favour of salting.
- 6.9 The 'Season' is divided into two periods:
   High Risk November to March
   Low Risk October and April
   (Instructions are only issued when salting is required).
- 6.10 The Highways Authority will not respond to requests for treatment off the gritted network by the Police Authority, unless as detailed in 6.1.
- 6.11 Precautionary spreading operations are primarily carried out utilising prewet treatments at a ratio of 70/30 dry salt to brine.

#### 7 Treatments for Snow, Ice and Freezing Rain

- 7.1 Lincolnshire County Council has a statutory duty under Section 150 of the Highways Act and Section 111 of the Railways and Safety Transport Act 2003 to remove obstructions. Snow is considered to be an obstruction when it impedes the use of the road network. The Met Office will provide National Weather Warnings if any sizeable accumulations of snow are expected.
- 7.2 Timings of treatments for snow and ice shall be based on the following table NWSRG Practical Guide for Winter Service.

Table H14 – Timing of treatments for snow and freezing rain				
Timing of treatment	Treatment type			
Before snowfall and freezing rain	Salt spreading			
During freezing rain, or where there are minor accumulations of ice	Salt spreading			
During snowfall	<ul><li> Ploughing</li><li>Salt spreading</li></ul>			
After snowfall • When there is slush on the road	<ul><li>Ploughing</li><li>Salt spreading</li></ul>			
After snowfall • When there is compacted snow or ice on the road	<ul> <li>Ploughing</li> <li>Salt spreading</li> <li>Salt and abrasive mixtures</li> <li>Abrasives only</li> </ul>			

- 7.3 When snow is forecast advanced salting at 20g/m<sup>2</sup> Pre-Wet will take place on the precautionary salting routes. Time permitting a further run may be carried out to increase salt coverage to 40g/m<sup>2</sup> Pre-Wet. Pre-snow salting may be considered for severe weather routes if time permits. This will provide a de-bonding layer and facilitate the breakup and dispersal of snow by subsequent treatments and traffic.
- 7.4 Division which may be affected by the snow will contact the Fleet Operator and inform them of the impending falls. They will be asked to prepare the snow blowers and that fitters will be available to change plough blades etc. at depots when required.
- 7.5 Snowfalls will be categorised into one of the following types:
  - a) **Heavy Snowfall** Over 100mm or moderate snowfall is drifting. Normally dealt with by ploughing.
  - b) **Moderate Snowfall** Over 25mm and up to 100mm. Normally will be dealt with by ploughing and salting
  - c) **Light Snowfall** up to 25mm. Normally will be dealt with by additional salting unless drifting occurs.
- 7.6 It is impractical to spread sufficient salt to melt more than very thin layers

of snow and ice. Ploughing is the only economical, efficient, effective and environmentally acceptable way to deal with all but light snow. Therefore when snowfalls are forecast that could create plough-able conditions (25mm or greater) the Highway Works Term Contractor will be contacted to fit ploughs to main line gritters and to arrange hand crews for clearing and salting footways. Each vehicle will be given specific routes to plough.

The modern Schmidt Cirron and equivalent snow plough's with ceramic or steel blades fitted to the gritter fleet are designed to plough back to the carriageway surface (plough to black). The older redundant plough blades were only able to plough down to within 20mm of the carriageway surface.

- 7.7 When **Heavy Snowfall** is forecast divisional officers will contact respective Ploughing Contractors and farmers to arrange additional resources.
- 7.8 When prolonged falls are forecast, continuous ploughing to prevent snow build-up should commence. The ploughing can be combined with simultaneous salting at 20 40g/m<sup>2</sup> Dry (Abrasive mixture 50/50 mixture of sand/salt to be considered) so that a wet base can be maintained. Once the snow depth has reached 100mm or the snow is drifting, or the gritter is salting on a gradient it may be desirable to plough without salt. (*The salt should still be loaded as it will aid the traction of the gritter to the maximum legal weight limit of the vehicle. (i.e.:- as a general rule if the plough is fitted then the vehicle can carry a "Full hopper load of salt" provided that the brine tanks are empty of solution.)*
- 7.9 Roads with vertical speed humps will not be ploughed. Vertical speed humps must be detailed on all route cards for the driver, as their presence constitutes a driving hazard whilst carrying out ploughing operations.
- 7.10 As snow melts due to the action of salt, slush may build up on the road. Ploughing may have to continue to remove this slush build up.
- 7.11 If conditions deteriorate to an extent that resources cannot maintain the precautionary salted network then certain roads will have to be abandoned. Resources can be redeployed to maintain essential roads and when necessary be used to assist the emergency services in particularly urgent/life threatening situations. In these conditions the snow room may be set up in accordance with Lincolnshire County Council's Emergency Plan at the Emergency Planning Centre.
- 7.12 When the snow room is in operation Highways Client Services Staff will act as liaison between the snow room and Highways Divisions to compile two hourly network condition reports.
- 7.13 When conditions improve such that the precautionary salted network is satisfactorily cleared then resources will then be directed to clearing firstly severe weather routes and then other routes in order of importance. Hand crews will be directed to clear other footways only after hierarchy 1a

footways have been cleared and treated as set down in HM24.

7.14 Snow Clearance Priority:

(1) Precautionary Network (including access to emergency services buildings)

(2) Severe Weather Routes.

(3) Other important locations (including essential industrial and military establishments, mainline stations, bus garages, shopping centres, schools and pedestrian areas).

- (4) Other Commuter routes.
- (5) Single accesses to villages, hamlets and rural communities.
- (6) Residential roads and footways.
- (7) Roads to single premises.
- 7.15 When snow clearing is in operation it is vitally important to liaise with neighbouring divisions and adjacent authorities, particularly when moving from precautionary salting to snow clearing or vice versa to avoid non-treatment of certain parts of the network. This is particularly important with reciprocal salting arrangements. There is a presumption that during snow clearance operations each division will operate to its boundary or nearest agreed turning point.
- 7.16 Footways Priority should be given to shopping areas and where there is a high proportion of pedestrian traffic, in accordance with <u>HM24</u>.
- 7.17 Snow-blowers should be based at strategic locations close to known trouble spots on strategic routes and will be brought into action as necessary on the instruction of network management. Snow-blowers should never be used on level crossings.
- 7.18 Level Crossings *Network Rail or the appropriate rail authority* should be contacted when ploughing starts by Divisional Officers. This is to ensure that railway tracks at level crossings are not blocked by snow.
- 7.19 Post-snow Action The following work should be given consideration after snow operations:
  - 1) Clear all gullies and drainage outlets of obstructions.
  - 2) Sweep significant accumulations of grit from the carriageway and footways as soon as possible.
  - 3) Thoroughly wash down all vehicles and lubricate gritting equipment.
  - 4) Check all equipment and repair or replace all worn parts on snow ploughs, and report on plant performance to the network manager.
  - 5) Salt stocks level should be closely monitored and replenished as necessary.
  - 6) Inspect roads for frost damage and carry out any remedial work necessary to make the carriageway free of safety defects.

- 7) Inspect bridges and culverts liable to flooding ensure that they are clear of debris.
- 8) Carry out a survey of badly affected locations reporting to network management including a generalised assessment of other frost/snow/flood damage.
- 9) Sign defects where appropriate, ensuring "flood" boards and other relevant signs are available.
- 10)Highways Client Services to evaluate overall performance in consultation with Divisional and Term Contract and Fleet Contract staff and recommending changes to procedures to be incorporated into this document.

#### 8 Snow Clearance – Divisional Operational Procedure

- 8.1 Between 1700hrs and 0800hrs and at weekends and at bank holidays the Divisional Duty Officer will be contacted by the Out of Hours Duty Officer when snow begins to fall. At other times the Divisional Duty Officer is to maintain close contact with the Forecast Provider when snow is forecast.
- 8.2 Out of Hours the Divisional Duty Officer will contact the following staff as soon as it has been determined that ploughs are to be fitted relevant Head of Highways and Area Highways Managers. The instruction will be passed on to the Contractor by the OHDO's.
- 8.3 If it is considered before the event that ploughs may be needed during the night, the Area Highways Managers and relevant Head of Highways should be aware of such action.
- 8.4 Snow Clearing operations based on the non priority network will be coordinated by divisional staff. Operational instructions will be passed to the Contractor who will be based at the Operational depots, plus other contractors. DHM's will normally be in overall control of decisions such as when the priority network is satisfactory for moving to severe weather routes.
- 8.5 By 0900hrs each day the Area Highways Managers are to ensure that the details of plant in use are forwarded for the attention of the Divisional Engineering Team. The "Daily Plant Returns (Snow Clearing)" (<u>Appendix WMP/8/1</u>) and the "Hired Plant" summary forms (<u>Appendix WMP/8/2</u>) are to be used for this purpose. A copy of these returns will be taken by the Admin team before they are processed by the Divisional Engineering Team. The Divisional Engineering Team will complete form (<u>Appendix WMP/8/3</u>), provide copies for the relevant Head of Highways and fax/email a copy to HQ Maintenance Section as soon as possible after 0900hrs. The Divisional Engineering Team will at the same time complete the road condition report (<u>Appendix WMP/8/4</u>) and fax copies to Service Development and Snow Room **Only if snow room in operation.**
- 8.6 During the shift/period the above forms will be updated by the Area

Highways Manager's Team to reflect the current position with regard to plant/labour utilisation.

- 8.7 As soon as possible after the end of each shift/period the Division will agree with the Highway Works Term Contractor the labour and plant used and finalise the "Daily Plant Return (snow clearing)" report. This will form the basis of an agreed measurement duly signed by both Client and Contractors. **Note: All contract item numbers to be agreed at this stage.**
- 8.8 By 0900hrs the following day the agreed report is to be passed to the Divisional Engineering section who will summarise the returns using the LCC Summary sheet and raise a retrospective order. (The completed summary sheet will be sent to Highways Works Term Contractor's HQ for record purposes).
- 8.9 The agreed report will also contain details of salt and grit used which should be extracted by the Divisional Engineering section and recorded on the "Salt Stocks Register".
- 8.10 During snow operations where Contractor Patrol Crews are employed between the hours of 1900 and 0600, although allocated to predetermined routes, the Out of Hour Duty Officer may be required to direct these crews to other location within the Division. A detail log of action should be faxed by the Out of Hours Duty officers to the Divisional Office by 0600 hrs the following day.

#### 9 Snow Room – Operational Procedures

- 9.1 The **Executive Director for Environment & Economy** as a Category 1 Responder will declare an Emergency under the Civil Contingencies Act 2004 and call for the setting up a Strategic (Gold) Co-ordination Group – see HM36 for further details. This will be in accordance with the Lincolnshire Resilience Forums Severe Weather Plan.
- 9.2 The following organisations may have representatives in the snow room when it is in operation:
  - 1. LCC Highways
  - 2. Lincolnshire Police
  - 3. Lincolnshire Fire & Rescue
  - 4. Ambulance Service
  - 5. District Councils
- 9.3 The Snow Room will be set up in the Civil Contingencies Centre at Fire & Rescue Headquarters on South Park in Lincoln. (Or other suitable location)
- 9.4 The Police will inform Highways, when the actual or expected levels of public calls become significantly greater than normal switchboard manning

can handle or there is an increase in road traffic accidents.

- 9.5 The Highways Out of Hours Duty Officers will transfer to and operate from the Snow Room.
- 9.6 Once the decision is made to open the snow room it should be activated as quickly as possible. This should be within 4 hours.
- 9.7 The main task of the Highways Representative once communications are established is to make contact with each Division to determine the initial status of the County's roads. This information is then plotted on the wall map in the snow room. All information is kept on form (Section 3 Snow Routes for example see <u>APPENDIX WMP/9/1</u>).
- 9.8 Once sufficient information is available and the public phone lines are in operation through the Customer Service Centre, these phone numbers are broadcast by local radio thus enabling the public to make contact. The Director of Development is then informed that the snow room is "going public".
- 9.9 The primary task of the Highways Representative is to maintain a constant flow of up to date information to the other liaison officers and the public phone desks. Information is then circulated in the snow room (Section 3 Snow Routes for example see <u>APPENDIX WMP/9/1</u>). Local knowledge of villages and the road network should be passed by Divisional Staff to the Highway Representative.
- 9.10 The Highways Representative has no dealings in the operational role of controlling snowploughs, other vehicles or the control of the labour force except in an emergency situation (in agreement with relevant Division).
- 9.11 The police will trace owners of abandoned vehicles and contact them.
- 9.12 A supply of forms and copies of "Winter Maintenance Route" maps are kept for reference purposes.
- 9.13 **Police Emergencies** Police emergencies are mainly missing person's problems. This is usually dealt with at Police Divisional level, but where a significant problem occurs then this is transferred to Police Headquarters. In both situations the police may request that the snow clearing vehicles are asked to keep a look-out for people or bodies on the highway in certain specific locations. This request is passed initially to the relevant Head of Highways who may authorise direct contact between snow-clearing vehicle and the snow room for further updates.
- 9.14 **Fire and Medical Emergencies** Fire and medical emergencies usually concern blocked roads on the route to a life and death situation which requires the Highways Department to assist in clearing passage for vehicles to their destination and return. In this case it is the responsibility

of the relevant Head of Highways to arrange reallocation of resources. In an emergency situation, after the initial reaction has been dealt with then the Executive for Environment & Economy must be informed of any changes in the situation and the final outcome.

9.15 **Use of Military Equipment** – The callout of RAF/Army equipment (helicopters, ambulances, fire fighting and snow clearance equipment) is in the hand of relevant emergency services and Assistant Director – Highways. The Highways Representative in the snow room has NO authority to call upon this equipment, but when such equipment has been called upon then liaison is the same as above.

#### 10 The Media

- 10.1 Coverage by the media of winter maintenance and particularly snow clearance is very important in making the public aware of the service provided and what roads are open or closed.
- 10.2 The Council will need to establish working arrangements with the local media to enable the presentation of timely and accurate information of which roads are open and which are closed. Local radio in particular considers this to be an important part of their broadcasting duties, and therefore provides an opportunity to build a good working relationship over wider issues. It is important for the Authority to clarify and agree respective services and specialist responsibilities with people dealing with the media.
- 10.3 It is important to define and agree key contacts with the press and broadcasting media and also establish a clear understanding of the most effective timings for information to be provided in order to reach necessary audiences and broadcast schedules. Information on costs, salt usage, plant usage, manpower etc. will be calculated by each Division.
- 10.4 In addition to supplying information to the press it is important to inform key stakeholders (these including emergency services, public transport operators, motoring organisations, and key local organisations).
- 10.5 The counties Media Service, Customer Service Centre staff and the Highways Out of Hours Duty Officer will utilise Twitter via "Gritter Twitter" to engage with and disseminate treatment actions and issues to the travelling public via Smartphone technology.

#### **11** Weather Forecast Service

- 11.1 Routine forecasts and updates will be issued by the Weather Forecast Provider via their internet based system and through the Vaisala Manager system:
  - (a) 1100hrs MAIN FORECAST

A summary 24 hour forecast for the County Detailed forecast for each of the 43 precautionary salting routes in a Route Based Forecast (RBF) form

- (b) 1800hrs EVENING UPDATE An update for the overnight period for each of the 43 RBF routes.
- (c) If significant changes take place then the forecast is amended.

#### 11.2 AMENDMENTS

The Forecast Provider will amend the forecast at any time:

- (a) If there is a change from "no frost" forecast to a "frost" or when the road minimum is between plus and minus 3 and a sustained difference between the forecast and actual curve of 2 degrees or more.
- (b) When there are significant changes to rainfall intensity and timing and road frost is expected or significant changes to snowfall is forecast.
- 11.3 As well as updating the Internet systems, the Forecast Provider will contact HQ during working hours who will in turn contact Division (0830-1630 hrs) and the out-of-hours duty office at all other times.

#### 11.4 CONSULTANCY SERVICE

A 24 hour consultancy service is provided by the Forecast Provider available to all decision making staff.

**NB.** In the event of the internet systems not operating, the above forecasts will be faxed to HQ by the Forecast Provider for onward transmission to Divisional offices.

#### 12 Duties of Out of Hours Duty Officer

- 12.1 No winter duties during normal office hours (except when snow room is in operation).
- 12.2 Collate and co-ordinate treatment decisions made by Divisional Contacts outside working hours to achieve consistent decisions.
- 12.3 Monitor weather and road information and take action when appropriate.
- 12.4 Ad-hoc reports of action, events and outcome to the Division if he has specifically requested it for a particular occasion or event.
- 12.5 Access all weather station sites hourly to check, their operation and

weather forecast performance.

- 12.6 Keep full records of events, decisions, actions, significant errors or forecasts and outcomes.
- 12.7 Report to the Division at the end of the night shift if something did not go as planned or expected.
- 12.8 Instruct the winter maintenance contractor when necessary as follows:
  - (a) If no driver working the nominated contract agent. This normally applies when decisions are made about "standing by", treating roads, the timing of treatments or there are amendments to previous decisions, including cancellation (i.e. most situations).
  - (b) If drivers working the nominated working supervisor (defaulting to (a) above if there are problems the Supervisor cannot deal with).

This could apply if operatives are "standing by" in depots and a Client decision has been made to treat the network or to cancel "stand by". It could also apply if treatment has commenced and the decision about treatment /timing is amended.

- 12.9 Assist the Highways Works Term Contractor in contacting Fleet Operator when the contractor has communications difficulties himself.
- 12.10 Receive end of treatment reports from the contract agent.
- 12.11 Issue Winter Maintenance Site Instruction when necessary utilising the Vaisala Manager system as required.
- 12.12 Contact Fleet Operator's Fleet Officer (Monday to Friday only) and pass details of Winter Maintenance vehicle defects. Saturday and Sunday pass defect details to appropriate Fleet Operator Duty Fitters.
- 12.13 Enter Winter Maintenance site details (forecast, temperature, salting decisions) from internet monitoring systems and Site instructions into WINTEMP 2.
- 12.14 To check routes have been completed correctly on the Gritter Tracking systems.
- 12.15 Utilise the "Gritter Twitter" service as appropriate.

#### **13** Examples of intervention required by Out-of –Hours Duty Officer

13.1 <u>Rising Road Temperatures Prior to Precautionary Run Commencing</u>

If actual road temperatures deviate from the forecast line by  $+1^{\circ}$ c and the forecast minimum is 0 to  $-1^{\circ}$ c and a decision has been made to treat. Contact the Forecast Provider for further advice: if the confidence of a road frost is still high do not amend decision, if there is low confidence, postpone decision and if drivers already at depots hold them on stand by and continue to monitor the situation.

#### 13.2 Rising Road Temperature After Commencement Of Precautionary Run

Conditions as in (1) except run, has already commenced. If the risk of frost has passed abandon run, if there is still risk do not amend decision.

#### 13.3 Falling Road Temperatures Which May Result In Road Frost

If the decision is not to treat and temperatures fall by  $-1^{\circ}c$  and the forecast minimum is  $+1^{\circ}c$  contact the Forecast Provider for advice. If road frost is now likely instruct contractor to treat (NB. the latest time to instruct the contractor and ensure completion of the network prior to the morning rush hour is 0300 hrs.)

#### 13.4 Rain Falling At Any Weather Station Site Prior To Run Commencing

Consult with the Forecast Provider: if rain is likely to persist postpone the treatment in that area and hold drivers on stand by if already in the depots and continue to monitor the situation.

#### 13.5 Rain Falling At Any Weather Station Site During A Precautionary Run

Consult with the Forecast Provider: if rain is likely to cease do not amend decision, if rain is likely to persist abandon treatment in that area and hold drivers on stand by and monitor the situation.

#### 13.6 Rain At Any Weather Station Site After Completion Of Precautionary Run

Consult with the Forecast Provider: if freezing is likely to when rain stops instruct the contractor to re-treat the routes in the area concerned.

#### 13.7 Police Report/Request Of Ice Formation On Priority Route Carriageway

No ad-hoc treatments should be carried out on the precautionary salting network. Decision to complete all routes in a Division or specified individual route only.

#### 14 ICE Prediction System Fault Reporting Procedure - Weather Station Not Registering

- 14.1 Check with the Bureau at Vaisala on 0121 683 1269 to make sure that the problem is not at their end.
- 14.2 If the fault is not with the Bureau get Vaisala to check to see if they can

determine whether the fault is with the telephone system.

- 14.3 If the fault is not one of the above and it occurs between:
  - (a) 1700hrs Friday and 1700hrs Sunday then report fault when possible to either the Principal Maintenance Engineer or Engineer.
  - (b) At all other times report fault to the Highways Service Development Maintenance team the following working day.

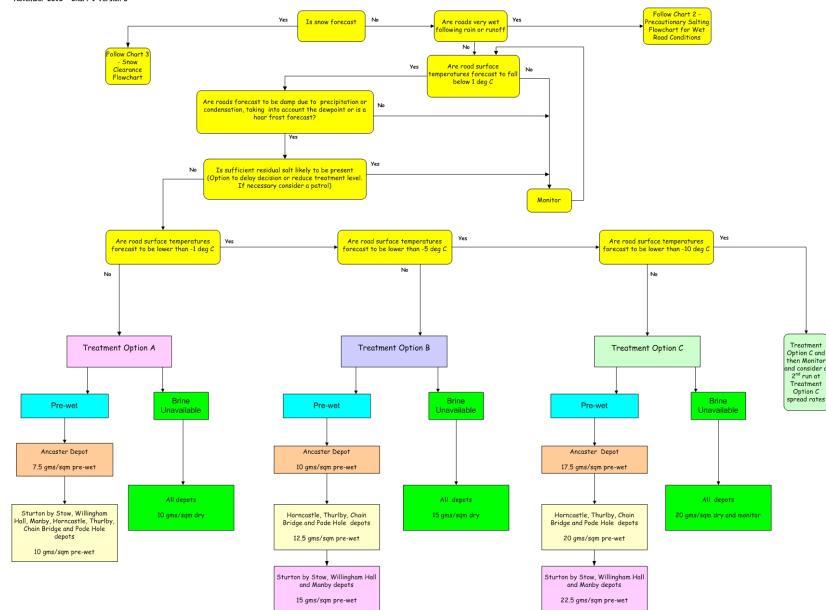
## **15** Precautionary salting and snow clearing flow charts (Examples detailed below).

Charts may be amended outwith of the timescales to update this plan to take account of the most up to date technical guidance available as detailed in section 1.5.

Decision making staff to use the most current flow charts available at time of action.

LINCOLNSHIRE COUNTY COUNCIL HIGHWAYS & TRANSPORTARION November 2012 - Chart 1 Version 5

#### CHART 1 - PRECAUTIONARY SALTING FLOWCHART FOR DRY OR DAMP ROAD CONDITIONS



#### Notes:

General

1- The treatment time should allow for all routes to be treated prior to ice forming - subject to residual salt.

2 - The latest callout time in the morning to ensure completion of precautionary route network prior to the rush hour is 0300 hours.

3 - Runs may be timed to avoid rush hour traffic. This is to prevent low speeds and stop/start manoeuvres where spread patterns become ineffective.

4 - All routes to be completed after rainfall. If rain occurs during run the treatment should be suspended and recommenced once rain ceases. If rainfall is heavy then reconsider treating whole route again.

5 - Decision Matrix based on guidance contained within Winter Service Section of Well – Maintained Highways Code of Practice for Highway Maintenance Management issued 29<sup>th</sup> November 2011 and the NWSRG guides Treatments for Ice and Snow issued 25<sup>th</sup> January 2010.

#### Treatment Times - Drivers Hours Regulations

6 - For situations of a High or Medium Confidence Forecast of a morning Hoar Frost, treatments can be made so that gritting runs are completed by 2330 hours the previous evening.

#### Treatment Rates

7 - Dry Salting - Note MAXIMUM spread rate 20 gms/ sqm.

8 - Treatment rates at specific Depots may be altered to take account of moisture content of salt following laboratory tests. Maximum allowable moisture content is 4%

9 – Ancaster and Horncastle depots run with a 10% mixture of an ABP (Safecote) in the brine

10 – Routes from Willingham Hall, Sturton by Stow, Horncastle and Manby depots are based on Matrix G of NWSRG guide.

11 -Routes from Ancaster, Thurlby, Pode Hole and Chainbridge depots are based on Matrix K of NWSRG guide.

12 - Road temperatures for decision making to be based on domain text minimums and Route Based Forecast minimums. This to take into account known frost hollows on the treated network.

#### Duration of Treatment

13 - If period below freezing to exceed 8 hours then Grip Factor to be monitored and if necessary a second run to be considered

14 - Second runs carried out within six hours of initial treatment may be at 50% of the initial spread rates if no runoff water or ice present.

15 – Pre-wet treatments from Horncastle and Ancaster utilise ABP's within the brine which reduces the need for second treatments

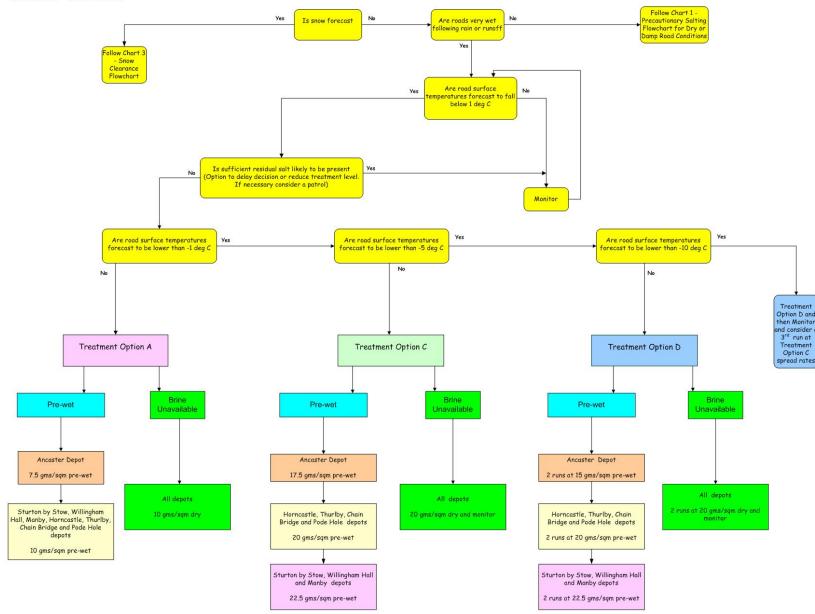
#### <u>Marginal Nights</u>

16 - On marginal nights when RST's are not forecast to go below -1 individual depot runs to be considered based on the Route Based Forecasts from the Met Office.

Prolonged Spells of Ice/Snow

17 - Consideration to be given to running routes in reverse during prolonged periods of continuous operations. LINCOLNSHIRE COUNTY COUNCIL HIGHWAYS & TRANSPORTARION December 2011 - Chart 2 Version 2

#### CHART 2 - PRECAUTIONARY SALTING FLOWCHART FOR WET ROAD CONDITIONS



# General

Notes:

1- The treatment time should allow for all routes to be treated prior to ice forming - subject to residual salt.

2 - The latest callout time in the morning to ensure completion of precautionary route network prior to the rush hour is 0300 hours.

3 - Runs may be timed to avoid rush hour traffic. This is to prevent low speeds and stop/start manoeuvres where spread patterns become ineffective.

4 - All routes to be completed after rainfall. If rain occurs during run the treatment should be suspended and recommenced once rain ceases. If rainfall is heavy then reconsider treating whole route again.

5 - Decision Matrix based on guidance contained within Winter Service Section of Well - Maintained Highways Code of Practice for Highway Maintenance Management issued 29<sup>th</sup> November 2011 and the NWSR6 guides Treatments for Ice and Snow issued 25<sup>th</sup> January 2010.

#### Treatment Rates

6 - Dry Salting - Note MAXIMUM spread rate 20 gms/ sqm.

7 - Treatment rates at specific Depots may be altered to take account of moisture content of salt following laboratory tests. Maximum allowable moisture content is 4%.

8 – Ancaster and Horncastle depots run with a 10% mixture of an ABP (Safecote) in the brine

9 - Routes from Willingham Hall, Sturton by Stow, Horncastle and Manby depots are based on Matrix G of NWSRG guide.

10 -Routes from Ancaster, Thurlby, Pode Hole and Chainbridge depots are based on Matrix K of NWSRG guide.

11 - Road temperatures for decision making to be based on domain text minimums and Route Based Forecast minimums. This to take into account known frost hollows on the treated network.

#### Duration of Treatment

12 - If period below freezing to exceed 8 hours then Grip Factor to be monitored and if necessary a second run to be considered

13 - Second runs carried out within six hours of initial treatment may be at 50% of the initial spread rates if no runoff water or ice present.

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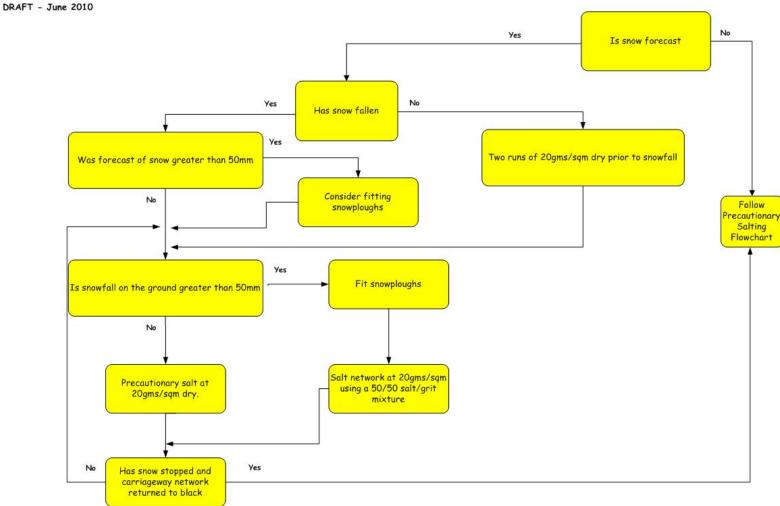
#### Marginal Nights

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Prolonged Spells of Ice/Snow

16 - Consideration to be given to running routes in reverse during prolonged periods of continuous operations.

#### LINCOLNSHIRE COUNTY COUNCIL - SNOW CLEARANCE FLOWCHART HIGHWAYS & TRAFFIC



#### Notes:

 When snow ploughing is ongoing divisions ae to set up snow rooms to control operations

2- County snow room will be set up in Extreme Winter Condition cases in accordance with LRF procedures

3 - During 24 hour snow clearing operations divisions are to liaise with Translinc over fitters operating from depots.

4 - Consideration to be given to drivers and mates being brought into depots on a standby basis.

5 - When snow conditions are forecast divisions to order grit sand for snow clearing operations.

6 - Grit/sand shall be 2 - 6m coarse/sharp sand.

 7 - Gritters should be double manned when snow ploughing or travelling during blizzard conditions.
 If slush ploughing gritters only need to be single manned.

8 – Footway treatments should follow guidance contained in HM24 and appendix WMP/2/HM24-1 of the Winter Maintenance Plan.

9 - Consideration should be given to spread extra salt on hills.

10 - Consideration should be given to having one of the North Division spare gritters dedicated to gritting the main hills in Lincoln during periods of snow.

11 – Ploughs must only be fitted to gritters that are empty of brine, due to axle loading constraints. Brine can either be used in pre-wet operations prior to snow or emptied into brine facility bund walls and re-circulated.

12 - Severe Weather Routes should only be treated during daylight.

# 16 Cross Boundary Procedure

- 16.1 (a) Liaison and communication arrangements with other authorities (Appendix WMP/16/1)
  - (b) Liaison will take place with other Local Authorities responsible for winter maintenance service on roads within and adjacent to the County regarding their treated routes and treatment decisions. Additionally, there is an exchange of treatment action instructions.
  - (c) Any road treated by an adjoining authority would be treated in accordance with that authority's policies for operational purposes and not the local highway authority's policies.
- 16.2 The current cross boundary arrangement with neighbouring authorities are as follows:
  - o <u>North Lincolnshire</u>
  - Nottinghamshire
  - North East Lincolnshire
  - o <u>Leicestershire</u>
  - o <u>Rutland</u>
  - o <u>Peterborough</u>
  - o <u>Cambridgeshire</u>
- 16.3 Road gritted by North Lincolnshire on behalf of Lincolnshire County Council
  - C227 from County Boundary to C228 High Street East in Scotter village.
  - A159 from County Boundary to junction with C228 High Street East in Scotter village.
  - B1211 from County Boundary to B1210 north for Brocklesby.
  - B1210 from County Boundary to B1211 north for Brocklesby.
  - B1400 from County Boundary south of Scallow Grove to County Boundary at Black Walk Nook.
  - C221 from County Boundary to A159 junction in Scotter.
- 16.4 Roads gritted by Lincolnshire County Council on behalf of North Lincolnshire
  - A18 from County Boundary to junction with B1210.

- B1210 from County Boundary to junction with A18.
- A1084 from County Boundary to A18 roundabout in Brigg.
- B1434 from County Boundary to County Boundary.
- B1205 from County Boundary to County Boundary.
- 16.5 Road gritted by Nottinghamshire on behalf of Lincolnshire County Council
  - A1133 length in Lincolnshire near Girton.
  - A1133 from County Boundary to A57 at Newton-on-Trent.
  - A57 from western junction with A1133 west to County Boundary.
  - A631 from County Boundary over Gainsborough Bridge to A156.
- 16.6 Roads gritted by Lincolnshire County Council on behalf of Nottinghamshire
  - A17 from County Boundary west of Beckingham in Lincolnshire to the roundabout at the junction with C208 Beacon Hill Road/Stapleford Lane including the western side of the roundabout.
  - C412 from County Boundary at Balderfield to B6326
  - Spalford Road from County Boundary through Spalford to A1133

# In times of prolonged freezing:

- C158 (C82) from Lincolnshire/Nottinghamshire boundary near North Scarle to the A1133 at Besthorpe.
- C163 (C128) from Lincolnshire/Nottinghamshire boundary near Swinderby to the A1133 at Collingham.
- C123 (C44) from Lincolnshire/Nottinghamshire boundary near Stapleford to the A17 near Coddington.
- 16.7 Road gritted by Peterborough CC on behalf of Lincolnshire County Council
  - B1081 from County Boundary to A43.
  - B1443 from A43 junction east to County Boundary.
  - A43 from junction with B1443 to County Boundary.
  - New A16 from new roundabout at A16/A1073 junction, Crowland to County Boundary.
  - Existing A1073 from new roundabout at A16/A1073 junction, Crowland to County Boundary.

- 16.8 Roads gritted by Lincolnshire County Council on behalf of Peterborough CC
  - A15 from A16/ B1525 roundabout across County Boundary to A15/ B1524 roundabout.
  - B1524 from B1525 roundabout to A15 Maxey roundabout.
- 16.9 Road gritted by Rutland on behalf of Lincolnshire County Council
  - A606 from County Boundary to the junction with B1081
  - B1081 from County Boundary to junction with A606.
  - C432 from County Boundary to junction with C431 Station Road
- 16.10 Roads gritted by Lincolnshire County Council on behalf of Rutland
  - B1176 from County Boundary to A6121 north of Ryhall.
  - A6121 from County Boundary to County Boundary through Ryhall.
- 16.11 Road gritted by Cambridgeshire on behalf of Lincolnshire County Council
  - N/A
- 16.12 Roads gritted by Lincolnshire County Council on behalf of Cambridgeshire
  - Bythorne Bank from Chapel Gate at County Boundary to Cross Drove
  - B1166 from County Boundary at South Eau Bank crossing bridge to Marshall's Bank.
- 16.13 Road gritted by Leicestershire on behalf of Lincolnshire County Council
  - C427 from County Boundary (north east of Normanton) to Long Bennington C418 Main Road.
- 16.14 Roads gritted by Lincolnshire County Council on behalf of Leicestershire

- C440 from County Boundary to Harston village junction with Denton Lane.
- C492 from County Boundary to Harston village junction with Woolthorpe Lane.
- 16.15 Road gritted by North East Lincolnshire on behalf of Lincolnshire County Council.
  - A1173 from County Boundary to junction with A18.
  - Hatcliffe Road from B1203 to County Boundary.
  - C243 Stallingborough Road from South Street to County Boundary
- 16.16 Roads gritted by Lincolnshire County Council on behalf of North East Lincolnshire
  - A46 from County Boundary going east to A46 roundabout.
  - Old Main Road from A46 through Irby upon Humber to A46.
  - A18 from County Boundary to C638 Whites Road.
  - A16 from County Boundary to B1219 roundabout.
  - A1031 from County Boundary to junction with B1219.

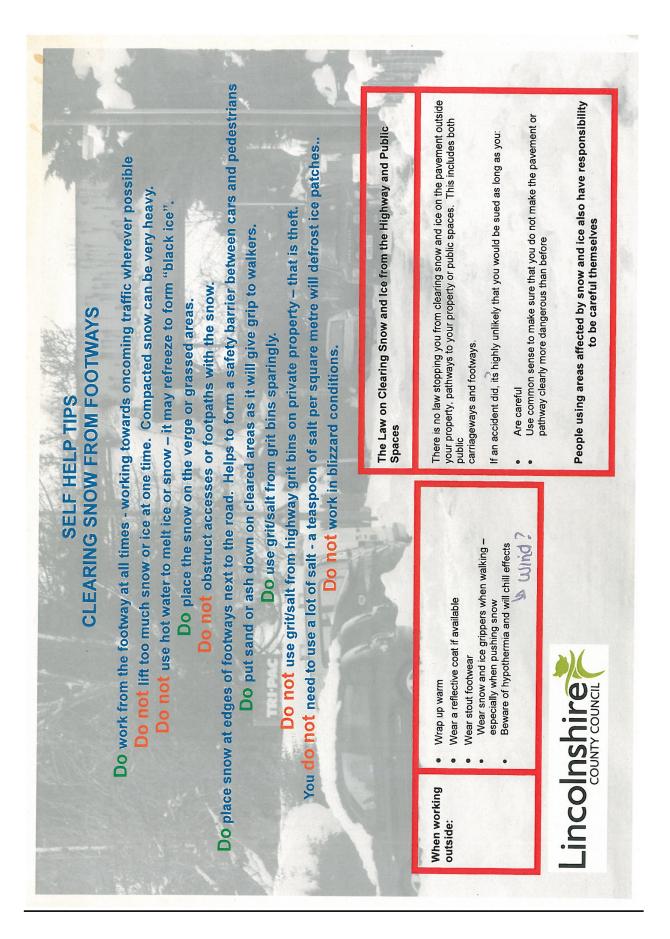
# **17** Public Self Help Guidance literature

- 17.1 Based on national guidance issued by the Department for Transport Lincolnshire has produced two self help tips documents. These are:
  - Clearing Snow From Footways
  - Clearing Snow Off The Carriageway

These will continue to be distributed to the public

Examples detailed below.





## 18 Use of Rebated Diesel Oil (Red Diesel)

18.1 Clarification has been sought from HMRC concerning the use by private contractors and farmers of rebated diesel in agricultural/farm equipment when snow clearing. Attached are copies of the latest correspondence.

, · · ·			
	HM Revenue & Customs	RECEIVED IN The Executive Councillore Office - 3 NOV 2011	Ralli Quays West
	Councillor William Webb		Stanley Street Salford M60 9LA Tel 0161 827 0910
•	Lincolnshire County Council County Offices Newland Lincoln		Fax 0161 827 0342
	LINCOIN LN1 1YL		Email john.loughney@hmrc.gsi.gov.uk
	Date 1 November 2 Our Ref AA/2011/061 Your Ref WSW/LJ	2011 7/JAL	www.hmrc.gov.uk
	Dear Mr Webb,		
	Red diesel		
	there is a need for a perma for the temporary relaxation winter again turn out to be s	rently reviewing the rules on sn inent change in the rules. I can n of enforcement of the rules ignificantly worse than the norm	
	is required but in the mean rules relating to excepted ver- clearance and gritting wor vehicle when it is being use for the purpose of clearing device. Agricultural vehicle snow plough fitted is entitle law on gritting differs in that solely for the conveyance of	time the normal roles apply in the ehicles - that is vehicles entitled k. The law says that a snow dor going to or from the place snow from public roads by miles are not excluded, so that, for ed to use red diesel for clearing t a qualifying vehicle must be C	change or a temporary relaxation shall therefore explain the current to use red diesel - used for snow clearing vehicle is an excepted where it is to be or has been used eans of a snow plough or similar or example, a farm tractor with a g snow from the public road. The constructed or adapted, and used, rial on roads to deal with frost, ice instructed nor used solely for such is.

I hope this has clarified the situation for you but please let me know if that is not the case.

Information is available in large print, audio tape and Braille formats. Type Talk service prefix number – 18001





My ref: WSW/LJ

26 October 2011

H M Revenues & Customs Oils Policy 3rd Floor Ralli Quays West 3 Stanley Street Salford M60 9LA County Offices Lincoln LN1 1YS Tel: 01522 552093 Fax: 01522 552072

Dear Sir/Madam,

# USE OF RED DIESEL BY FARMERS PROVIDING WINTER SERVICE SUPPORT IN EXTREME WEATHER TO LOCAL HIGHWAY AUTHORITIES

Lincolnshire County Council has carried out the annual review of its Winter Maintenance Operations, taking into account recommendations from both the Quarmby Review and the House of Commons Transport Select Committee's review into winter weather operations during December 2010.

However, in our attempts to strengthen community engagement, especially with the vital farming community, like other local authorities we have hit a stumbling block. The issue is related to the use of rebated fuel (red diesel) in farming equipment being used for snow clearance activities. We are pleased to note that HM Revenue & Customs has confirmed its pragmatic approach, in that during extreme weather farmers can use red diesel in their tractors to help grit and clear snow from public roads. This relaxation is, however, only implemented at the time of need by a special dispensation to relax the rules, and it is the delay in obtaining this relaxation that is the issue.

Farmers quite understandably are unwilling to engage in snow clearing activities until this dispensation is announced, and this delay means that communities, hospitals, schools and remote hamlets can be cut off by snow drifts etc which timely action could have otherwise prevented.

We are aware that under normal rules any vehicle that is specifically constructed or adapted for dealing with frost, ice and snow – such as a snow plough – can work on public roads while using red diesel.

INVESTOR IN PEOPLE

County Offices, Newland, Lincoln LN1 1YL www.lincolnshire.gov.uk

I write to see if it would be possible for a permanent more general exception to be made within the rules allowing farming equipment to use rebated fuel on the public highway for the purposes of snow clearance work.

I look forward to your response and thank you in advance for your assistance in this matter.

Yours sincerely

hilliam helps.

Councillor William Webb Executive Councillor for Highways & Transport

cc DfT DEFRA Lincolnshire MPs Cllr C Strange Cllr K Smith Cllr A Turner Alan Aistrup David Davies

# 19 <u>Mutual Aid and Self Help arrangements with Parish and District</u> <u>Councils.</u>

- 19.1 As part of a cross cutting action to engage with all communities within the county concerning how all parties could work together in times of emergency and crisis the following actions will be undertaken.
- 19.2 Highways staff will engage with all District Council's concerning mutual aid in times of severe weather. An example memorandum of understanding is attached.
- 19.3 Highways staff will engage with Town/Parish Councils and other Community Groups to encourage participation in a program of self-help and mutual aid. The aim being to provide a framework within which willing, locally based, volunteers clear snow, primarily from footways, within key areas of their community. In return for agreed participation, Lincolnshire County Council undertakes to provide limited amounts of additional salt/grit in "1 tonne sacks" at agreed locations. Those wishing to take part will need to agree to the following points:
  - Provide a contact point for the exchange of information
  - What are the priority footways that are intended to be cleared
  - Agree the quantity and location of additional salt supplies
- 19.4 Parish/Town Councils are encouraged to develop a Snow and Ice Plan as part of their Community Emergency Plan.

# LINCOLNSHIRE COUNTY COUNCIL/EAST LINDSEY DISTRICT COUNCIL MEMORANDUM OF UNDERSTANDING

### WINTER SERVICE DELIVERY

1, Lincolnshire County Council has responsibility to treat the priority network.

2, In times of continued severe or extreme winter weather when East Lindsey District Council have resources available, East Lindsey District Council will contact Lincolnshire County Council East Division Duty Officer to establish any requirements the Highways Authority has for treatment of the network.

3, The Duty Officer, upon establishing what resource the District Council has available, will direct East Lindsey District Council Duty Officer as to the areas to be treated and the order in which these should be done.

4, Lincolnshire County Council will supply sand/salt as required from either Horncastle or Manby Depots to East Lindsey District Council for this operation.

5, It is expected that the help required will be hand salting of footways (with the possibility of providing mechanical footway spreaders at a later date by LCC) and snow clearing of town/village centres and around strategic facilities eg bus/train stations, community buildings, hospitals, old peoples homes etc.

6, The District Council should update the County Duty Officer on progress and the condition of the net work.

7, All work will be in line with Lincolnshire County Council's Winter Maintenance Plan.

## APPENDIX WMP/2/HM24-1

#### Midlands Service Improvement Group (Winter Maintenance) Winter Service for Footways and Cycleways – Treatment Table (version 3)

Category	Overnight Frost Conditions	Daytime Frost Conditions	Extended Ice Conditions	Snow Events
	Overnight forecast temperatures below zero but not extending beyond 8am	Overnight forecast temperatures below zero extending beyond 8am	Persistent widespread ice (rather than frost) for more than 18 hours in a 24-hour period and a forecast not to rise above zero for a further 18 hours in the next 24 hours.	
1a	No treatment	Precautionary treatment	Monitor and further treatment as required when resources permit. Treatment only during normal working hours.	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to complete clearance within 12 hours of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
1	No treatment	No treatment	Monitor and treatment as required when resources permit. Treatment only during normal working hours.	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to commence clearance within 24 hours of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
2	No treatment	No treatment	Monitor and treatment as required when resources permit. Treatment only during normal working hours.	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to commence clearance within 48 hours of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
3	No treatment	No treatment	Reactive treatment not normally undertaken other than in response to specific circumstances. Treatment only during	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to commence clearance within 5
4	No treatment	No treatment	normal working hours.	days of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.

1. At all times priority will be given to the priority carriageway network.

2. Combined footway/cycleways are treated in accordance with footway hierarchy.

3. Segregated cycleways are not treated.

#### **Main Villages**

Main villages were defined in the County Structure Plan between 1981 and 1991 and updated on a later submission to the Secretary of State as the following villages:

## **BOSTON BOROUGH**

Butterwick Kirton Old Leake Sutterton Swineshead

### EAST LINDSEY DISTRICT

Binbrook **Burgh le Marsh** Chapel St Leonards Grimoldby/Manby Holton le Clay Legbourne \* Mareham le Fen North Somercotes North Thoresby \* Sibsey Stickney Tetford Tetnev Wainfleet Woodhall Spa Wragby

### NORTH KESTEVEN DISTRICT

Bassingham Billinghay Branston Eagle \* Heckington Heighington Helpringham \* Metheringham Navenby Ruskington Skellingthorpe Swinderby Waddington Washingborough

#### APPENDIX WMP/2/HM21-1

### SOUTH HOLLAND DISTRICT

Cowbit Deeping St Nicholas \* Donington The Droves (Gedney Hill, Holbeach Drove. Whaplode Drove, Shepeau Stow) \* Gosberton Moulton Pinchbeck Weston Whaplode \* SOUTH KESTEVEN DISTRICT Ancaster Barrowby Baston \* Billingborough Caythorpe Claypole \* Colsterworth Corby Glen Great Gonerby Langtoft Long Bennington Morton Rippingale South Witham Thurlby

#### WEST LINDSEY DISTRICT

Bardney Blyton Cherry Willingham Dunholme Ingham \* Keelby Nettleham North Kelsey \* Saxilby Scotter Sturton by Stow Sudbrooke Welton

(\* updated on a later submission to the Secretary of State) As approved in August 1999

#### APPENDIX WMP/2/HM31-1

# WINTER MAINTENANCE NETWORK EVALUATION (version 4)

POINT SCORING SYSTEM FOR NEW ROADS.

This scoring system has been designed to prioritise roads which have been requested as possible additions to the network

	Reference Number	

Requested By –	
Location	
Road Name and Number	
Distance	
Average Width of road	
Obstructions to Gritting operations:,	
Speed retarders, access for plough etc	
Can Gritter turn around if required with out	
reversing ?	

1: Is Road suitable for gritters (Width, ability to exit without using reverse gear etc.) Yes / No	If No - do not proceed
2: Is reasonable alternative treated route available Yes / No	If Yes- do not proceed
3: Is sufficient capacity available on relevant route Yes / No	If No - do not proceed

Item	Notes	Points	Occ	Road Speed	Total
Public service bus route ( daily )	Service provided at least 5 days / week	20			
Public service bus route (less than daily)	Service provide less than 5 days / week	10			
School bus route	Contract route (16+seater PCV Licence required)	20			
Injury accident record ( last three years )	Ice & snow related 15pts per reported accident.	15			
Health centre on route	GP practice.	15			
Railway / Bus station on route	15pts. awarded for each	15			
Bends	5pts each	5		< = 30	
				31-50	
				51 >	
Junctions	1pts each	1		< = 30	
				31-50	
				51 >	
Steep gradient	10pts if 1 or more gradients ( > 1 in 15 over 50m )	10			
Deep drains or water course adjacent to rd.	10pts / side (Over 2m from C/way level to bed level	10			
Ditches	5pts / side (within 1m of C/way, less than 2m deep)	5			
		Total Po	int Scor	e =	

NB. Only 1 Public Service or School bus scores to be used. Road Speed: up to 30mph = x1 , 31mph to 50mph = x2 , 51mph and above = x3

Total Points Score	Divided by road length	= FINAL SCORE	
Engineering			
Comment.			

#### APPENDIX WMP/2/HM34-1

# WINTER MAINTENANCE - GRIT BIN EVALUATION

#### POINT SCORING SYSTEM FOR EXTERNAL APPLICATIONS

This scoring system has been designed to prioritise requests for Grit Bins to be added to the public highway network.

Requested by – Name and Address -			
Proposed location of grit bin -			
Indicate use of grit bin –	carriageway or fo	potway treatment	
Road name and number	r —		

1: Is it Maintainable Public Highway. Yes / No	If No – do not proceed
2: Is there a suitable location for a grit bin. Yes/No	If No – do not proceed
3: Is there a Responsible Body to look after grit bin? Yes/No If yes who -	lf No – do not proceed

ltem	Notes	Points Carriageway	Points Footway	Total
Gradients	<ul> <li>Greater than 1 in 20</li> <li>1 in 20 to 1 in 30</li> <li>Less than 1 in 30</li> </ul>	75 0 0	75 40 0	
Proximity of existing grit bin	<ul> <li>Within 50m</li> <li>50 – 100m</li> <li>100 – 200m</li> <li>Greater than 200m</li> </ul>	-100 -50 0 30	-100 -50 0 30	
Number of premises for which this is the only access route	<ul> <li>Over 50</li> <li>20 – 50</li> <li>Less than 20</li> </ul>	30 20 0	30 20 0	
Community facilities (within 200m of proposed grit bin)	<ul> <li>School (Not directly on treated network)</li> <li>Post Office/local shop</li> <li>Local shopping centre</li> <li>Community/Medical Centre</li> </ul>	20 10 20 0	30 20 30 10	
Winter route priority of location of proposed grit bin.	<ul> <li>On Priority Gritting Network</li> <li>On Severe Weather Gritting Network</li> <li>Not on gritting network</li> </ul>	-200 -100 20	NA NA NA	
IN ORDEF	R TO PROVIDE A GRIT BIN, SCORE MUST	EXCEED 50 POINT	TS TOTAL POINTS	

## Winter Maintenance Duty Officers Conference Call - Protocol.

#### Background.

Following the publication of the 2010/2011 Winter Maintenance Plan the following requirement is contained within Section 4:

"Duty Officers will liaise with each other utilising a telephone conferencing system such as the Arkadin System. Wherever possible, Divisions should have a common treatment and start time."

This policy does not require Duty Officers to liaise with each other on every decision or on a daily basis. Therefore the following practical guide describes when it is appropriate to make conference calls.

### Arkadin System

The conference call has been set up on the Arkadin Global Conferencing System. The system is very easy to use and can be accessed from either a landline or mobile phone. The system has been set up for this call so that a Moderator is not required to set the call up on every occasion. All you need to do at the allotted time is or any agreed time:

- Telephone either:
  - Toll free access number: 08003763912
  - o or if there is a problem a Toll charge access number: 02033645095
- You will then be asked for a "participants pin" which you dial in. This is XXXXX#
- Then wait for the other participants to join and then start the discussion.
- When you have finished just put the phone down.

This system can be used at any time during the winter season by any member of staff involved with winter maintenance to make a conference call.

#### System Protocols

The Met Office operates to the following readiness warning state system for the Open Road service.

	Readiness Colour Coding						
GREEN	Road surface temperatures are expected to remain above freezing with no ice/hoar frost/snow accumulations. Confidence HIGH						
AMBER	Road surface temperatures are expected to fall close to or below freezing. Confidence is LOW regarding ice and/or hoar frost and/or snow accumulations.						
RED	Road surface temperatures are expected to fall to or below freezing with ice and/or hoar frost and/or snow accumulations likely. Confidence HIGH.						

- During the working day where the forecast readiness is green. A conference call is not required.
- Where the forecast readiness is Amber and runs are unlikely. (e.g. +3c on a high confidence forecast). The instruction will normally be "marginal forecast" and "monitoring but run unlikely". A conference call is not required.
- All other scenarios will require a conference call. (e.g. Where the forecast readiness is Amber or Red in one or more areas)

## 12.00 noon conference call

The aim at lunchtime should be to make the treatment decision or if a marginal situation then to be able to give the contractor (and the OHDO coming on duty later) notice of likely intentions for the evening. This is subject to any substantive changes in weather conditions or forecast. The majority of decisions are to wait for the evening update and it is only on a small number of occasions the gritters are required to treat during the working day.

If the Duty Officer is unable, due to diary commitments, to monitor the forecasts and attend the conference call then a suitably trained deputy should carry out this task. Instructions may be given to support staff to communicate decision via the conference call, when the Duty Officer or Deputy is not available. Support staff are not trained and therefore do not make any WM decisions.

The conference call timing should be flexible to accommodate late forecasts.

#### 18.00 conference call

The aim of the 18.00 conference call is to discuss the evening update from the Met Office and finalise treatment decisions if possible. If it is not possible to finalise actions then a further conference call may be needed later.

#### Morning conference calls

The Met Office issue a morning forecast summary which is received between 07.30 and 08.00. Where a gritting run is likely to be required before 3.00pm, due to the forecast, then the OHDO or Service Development will contact Divisional Duty officers. A conference call could be made if required.

### Severe Weather

In Severe Weather situations divisional snow room will be in operation to offer a coordinated response to the contractor, if required. In severe weather there may be a need for more than one conference call during normal hours and outside.

#### Extreme Weather

In Extreme Weather situations both county and divisional snow rooms will ne operational and conference calls are likely to include emergency services staff.

# APPENDIX WMP/8/1

North Division Other Contractors Snow Clearing Resources

Daily Plant Return (Snow Clearing)

Other	Reg No	C/S	Plough	Location	Time on	Time off	Total Time		Costings		Comments
Resources	Reg No (Plant No)	lant No)					Item No	Rate	Total		
Total Salt u				1	1	I	1	1	l	I	1

Total Salt used

|--|

Signed		(Contractor)
<b>J</b>		· · · ·

Signed \_\_\_\_\_

(Client)

Date:\_\_\_\_\_

## **APPENDIX WMP/8/2**

# **North Division**

# Hired Plant Performa – Snow Clearing

Commitment Reference Number: \_\_\_\_\_

Week Ending: \_\_\_\_\_

Area: \_\_\_\_\_

Contractor: \_\_\_\_\_ Contact Tel No: \_\_\_\_\_

Ref./Plant No \_\_\_\_\_\_ Order No: \_\_\_\_\_

Plant (make and Type):\_\_\_\_\_ Contact with Base: Yes / No

Date	Time	Time	Standing	Location and	Duty		llocation of Hours		
Date	on	off	Standing	Comments	Officer	Basic	Overtime	Total	
SUNDAY									
MONDAY									
TUESDAY									
WEDNESDAY									
THURSDAY									
FRIDAY									
SATURDAY									

# North Division

# **Snow Conditions**

# **Divisional Resources Report**

This report is to be telephoned or faxed to Highways Service Development at 09.00 hrs or as soon as practically possible each day. The information required is:

# **1.** Resources (Contractor, Farmers and other Labour)

- a. Yesterday
- b. Overnight
- c. Today's Plan

## 2. Problems

- a. Operational Vehicles (broken down, accident damage)
- b. Salt

## **3. Surplus Resources**

# 4. Resources from outside the County

## SERIES 2800 WINTER MAINTENANCE

A	(ALPHA)	2 Way	Open to all traffic	Black tarmac
В	(BRAVO)	2 Way	Open to all traffic	Soft snow slush ice lying on road surface
С	(CHARLIE)	2 Way	Passable – NO ARTICS -	Hard packed ice/snow on road surface
D	(DELTA)	Single	Open to all traffic	Black tarmac *
E	(ECHO)	Single	No - ARTICS -	Soft snow, slush ice lying on road surface *
F	(FOXTROT)	Single	Passable – NO ARTICS -	hard packed ice/snow on road surface *
G	(GOLF)	Blocke d Road	BLOCKED ROAD Generally impassable to all traffic	Drifts of fresh snow up to 600mm deep. Left mounted plough can widen to 1 lane.
Н	(HOTEL)	Blocke d Road	BLOCKED ROAD Generally impassable to all traffic	Drifts over 600mm

# **APPENDIX 28/6 - Road Condition Report (Example)**

Weather status. \* An indication of snow depth on the blocked half will be included with these conditions.

e g:- CONDITION:- E ( Echo ) 600.

- 1. STATUS QUO
- 2. IMPROVING
- 3. DETERIORATING.

# Lincolnshire County Council WEST DIVISION

Date: AP

PE Time:

NI

#### Police Sub-division "B" X

	Λ
Μ	F

W MP	Route S	Status Key			Wea	ather Status
/9	Α	(Alpha)	2 Way	Open to all traffic	1	Clear
/1	В	(Bravo)	2 Way	Snowed over no artics	2	Improving
/ 1	С	(Charlie)	Single	Snowed over no artics	3	Deteriorating
	D	(Delta)	Blocked	Road generally impassable to all vehicle access	4	Blizzard Con

West Division									F	Route	Statu	IS	Weather Status				
Ref	Road	Loca	tion							Α	В	С	D	1	2	3	4
W01	A15	from	A16	a t	Market Deeping By Pass	t o		a t	Cty Boundary Northborough								
W02	A15	from	A16	t	Marke Deep	t o	1_1_	ə	Bou e								
W03	A15	from	A151	a	Lourne	t o	52	t t									
W04	A15	from	A152	a t	Three', gha.		153	a t	Slea rd								
W05	A15	from	A153	t	Sleaford	0	A17	a t	Sleaford	<b> </b>	<b>_</b>						
W06	A15	from	A17	a t	Sleaford	t o	B1202	a t	Boothby Graffoe								
W07	A15	from	B1202	a t	Boothby Graffoe	t o	A607	a t	Bracebridge								
W08	A17	from		a t	Cty Bdy Coddington	t o	A607	a t	Ledenham								
W09	A17	from	A607	a t	Ledenham	t o	A15	a t	Sleaford								
W10	A17	from	A15	a t	Sleaford	t o	A1121	a t	Swineshead Bridge								
W11	A52	from		a t	Cnty Bdy Muston	t o	A1	a t	Grantham								
W12	A52	from	A1	a t	Grantham	t o	B6403	a t	Cold Harbor								
W13	A52	from	B6403	a t	Cold Harbor	t o	A15	a t	Threekingham								
W14	A52	from	A15	a t	Threekingham	t o	A152	a t	Bicker								
W15	A607	from		a t	Cnty Bdy Harlaxton	t o	A152	a t	Grantham								
W16	A607	from		a t	Grantham	t o	A17	a t	Ledenham								
W17	A153	from	A607	a t	Honnington	t o	A15	a t	Sleaford								
W18	A153	from	A15	a t	Sleaford	t o	A155	a t	Coningsby								
<b>W/10</b>	A151	frame	Δ.1	a	Colotorworth	t	A15	a	Pourpo								

## **APPENDIX WMP/16/1**

Dear

### Winter Maintenance 2012/2013 Cross boundary arrangements Between X and Y.

I should be grateful if you would confirm that the cross boundary arrangements for precautionary gritting that exist will remain for the forthcoming winter. Could you please confirm these arrangements in writing and send it to me at the above address on this letter. Thank you.

The arrangements were as follows:

### Route gritted by Y on behalf of X.

- .
- •

### Route gritted by X on behalf of Y

- •
- •
- .

In addition, as part of your ? route when appropriate, would you include the following roads:

- .
- .
- .
- . . . . . . . .

as was established last year.

It is envisaged that the arrangements indicated above will only apply in respect of precautionary gritting operation, and liaison will take place during snow conditions, to ensure that appropriate action is taken.

Please treat this letter as constituting an agreement for the purposes of Sec 8, Highways Act 1980. All gritting operations carried out by your authority in our area should be undertaken according to your operational standards, and not ours.

Yours sincerely