

Open Report on behalf of Paul Coathup, Assistant Director (Highways & Transport)

Report to:	Highways, Transport and Technology Scrutiny Committee
Date:	13 September 2010
Subject:	Winter Maintenance Plan and Winter Maintenance Actions for 2010/2011

Summary:

A review of Winter Highway Maintenance Services was carried out during the winter of 2009/2010 in a review by the Highways, Transport and Technology Scrutiny Committee. This report will comment on progress of the actions from that report.

Based on the above report and guidance from expert views given during the Scrutiny Review a revised Winter Maintenance Plan has been developed and is attached for consideration.

The Winter Maintenance Plan sets out the Council's winter maintenance policies, legal duties and standards. The policy is in need of approval in readiness for the winter of 2010/2011 due to the need to:

1. Develop robust standards.
2. Take account of lessons learnt and pressures from last winter.
3. Comply with necessary legal changes.

This paper sets down the existing position and standards that it is proposed to operate to this winter.

Actions Required:

1. The Executive Councillor for Highways is requested to approve the Winter Maintenance Policies and Procedures in Appendix A for the winter of 2010/2011.
2. That a further review of the Winter Maintenance Plan takes place following the final report from the Quarmby Review.

2. Conclusion

As was stated by the Scrutiny Review in March 2010 the external challenge found that Lincolnshire's Winter Maintenance Plan was an example of good practice. However the opportunity has been taken to address some minor deficiencies that were found in the document as well as to clarify existing procedures by including them within the policy framework.

3. Consultation

The Scrutiny Review undertaken during the winter of 2009/2010 took into account the views of partner agencies and other interested parties on the winter maintenance service being provided at that time.

a) Policy Proofing Actions Required

n/a

4. Background Papers

BACKGROUND PAPERS			
The following background papers as defined in the Local Government Act 1972 were relied upon in the writing of this report.			
PAPER TYPE	TITLE	DATE	ACCESSIBILITY
DfT Review	The Resilience of England's Transport Systems in Winter	July 2010	http://transportwinterresilience.independent.gov.uk/docs/interim-report/wrr-interim-report-2010-07-26.pdf
Highways, Transport & Technology Scrutiny Committee Paper 8.0	Review of Winter Maintenance Services	29 th March 2010	Highways & Traffic, 4 th Floor, City Hall, Lincoln.
UK Roads Liaison Group	Well Maintained Highways – Complementary Guidance	December 2009	http://www.ukroadsliasongroup.org/pdfs/Well%20maintained%20highways%20January%202010.pdf
Highways, Transport & Technology Scrutiny	Winter Maintenance Plan and Winter Maintenance	7 th September 2009	Highways & Traffic, 4 th Floor, City Hall, Lincoln.

Committee Paper 6.0	Operations		
UK Roads Liaison Group	Lessons from the Severe Weather February 2009	July 2009	http://www.ukroadsliasongroup.org/liaison/winter.htm
Highways Policy Development Group	Changes to the Highway Maintenance Plan	3 rd November 2008	Highways & Traffic, 4 th Floor, City Hall, Lincoln.
Executive Paper 1.0	Highways Winter Maintenance – Changes to the Salted Routes Scoring System	4 th August 2008	Highways & Traffic, 4 th Floor, City Hall, Lincoln.
Highways Policy Development Group 5.0	Highway Winter Maintenance – Additions to the Salted Network	7 th July 2008	Highways & Traffic, 4 th Floor, City Hall, Lincoln.
Highways Policy Development Group 7.0	Highways Winter Maintenance – Changes to the Salted Routes Scoring System	13 th May 2008	Highways & Traffic, 4 th Floor, City Hall, Lincoln.
Executive	Highways Winter Maintenance – Additions to the salted network	9 th November 2007	Highways & Traffic, 4 th Floor, City Hall, Lincoln.
Highways Policy Development Group 10.0	Highways Winter Maintenance – Additions to the salted network	3 rd September 2007	Highways & Traffic, 4 th Floor, City Hall, Lincoln.
Executive Paper 00930	Highways Winter Maintenance – Additions to the salted network	4 th July 2006	Highways & Traffic, 4 th Floor, City Hall, Lincoln.

**LIST OF MAIN CHANGES BETWEEN CURRENT AND PROPOSED WINTER
MAINTENANCE POLICIES**

Policy	Main change
HM21	Policy redrafted. Only major change is that the addition of A1073 Spalding to Eye bypass to treated network has amended treated network figure from 2,990 km to 3,008 km.
HM22	A new definition of Extreme Winter Weather has now been included with additional duties placed on the Director of Development under the Civil Contingencies Act.
HM23	Incorporates policy on use of grit/sharp sand in winter maintenance operations.
HM24	A new category of a Hierarchy 1a footway for winter maintenance purposes has been included.
HM25	Correction of Highways Agency's name.
HM26	Policy redrafted. Major change is policy now includes definition on competent staff.
HM27	Recognition that the policy is for routes to be treated within 4 hours but that operationally 3 hours is being achieved.
HM28	Cross reference to new salt/grit bin evaluation criteria. Policy amended to include that salt/grit bins will be filled with a 50/50 mixture of salt and grit/sharp sand.
HM29	Definition of an average winter for budgetary purposes.
HM30	Policy amended to allow use of towed or demountable spreaders in severe or extreme winter weather. Operational changes under discussion with new Highways Works Term Contractor due to age of towed spreader fleet.
HM31	No major change.
HM32	Correction of policy required as highlighted in Scrutiny Review.
HM33	Clarification that this policy refers to permanent road signs.
HM34	Proposed new policy to evaluate the need for any Salt/Grit bin before they can be placed on the highway network. This to be read in conjunction with appendix WMP/2/HM34-1 which details the scoring criteria.
HM35	Proposed new policy on the treatment of the Secondary Routes as required by the Scrutiny Review
HM36	Proposed new policy on mutual aid arrangements as required by the Scrutiny Review.

APPENDIX B



Winter Maintenance Plan 2010/2011



Contents

Section 1 **Winter Maintenance Procedures**

1. Introduction
 2. Policy
 - HM21:** Priority Route Network.
 - HM22:** Severe and Extreme Winter Weather
 - HM23:** Treatment priorities in times of Severe Winter Weather or Extreme Winter Weather
 - HM24:** Treatment of footways
 - HM25:** Weather stations
 - HM26:** Suitably trained staff to monitor and control winter maintenance treatment decisions.
 - HM27:** Response required from the Highway Works Term Contractor:
 - HM28:** Grit/salt bins
 - HM29:** Budget for winter maintenance.
 - HM30:** Resources required for winter maintenance operations.
 - HM31:** Requests for additions to the Priority Route Network
 - HM32:** Cross border treatment arrangements.
 - HM33** "Road not gritted"
 - HM34:** Grit Bins
 - HM35:** Secondary Route Network
 - HM36:** Mutual Aid arrangements
 3. Responsibilities
 4. Decision making process
 5. Salt Storage and Brine Facilities
 6. Precautionary salting
 7. Snow clearance operations
 8. Snow clearance – Divisional Operational Procedures
 9. Snow room – Operational Procedures
 10. The Media
 11. Weather forecast procedures
 12. Duties of the Out of Hours Duty Officer
 13. Examples of Intervention required by the OHDO's
 14. Ice prediction system fault reporting procedure
 15. Example of Precautionary Salting and Snow Clearance
- flow charts
16. Cross Boundary Procedure

Section 2 Winter Maintenance Contacts

1. Divisional management contacts
2. Weather forecaster's contacts
3. Ice Cast computer system contacts
4. Winter maintenance contractors contacts (Non Trunk)
5. Vehicle contractor contacts
6. Winter Maintenance contractors contacts (Trunk)
7. Adjoining County Councils & Unitary Authorities
8. Police Station contacts
9. Neighbouring Counties HQ (24hr) contacts
10. Emergency Services contacts
11. Media contacts
12. Motoring organisation contacts
13. Network Rail contacts
14. National River Authority (NRA)
15. County Office contacts

Section 3 Operational Information

1. Gritter Specification and calibration
2. Divisional rotas
3. Snow Routes
4. Driver instruction and training booklet
5. Salting route statistics and Forms
6. Precautionary Salting Routes
7. Secondary Salting Routes
8. Footway Salting

Section 1

Winter Maintenance Procedures

Section 1

Winter Maintenance Procedures

1. Introduction

- 1.1 A Highway Maintenance Plan is produced and update annually. This plan sets out standards, policy and objectives for the highway network. The Winter Maintenance Plan is a supplement to the Highway Maintenance Plan.
- 1.2 Lincolnshire County Council (LCC) carries out precautionary treatment on carriageways in accordance with approved policy across the whole County.
- 1.3 All Trunk Road treatment is carried out by the Highway Agency Contractor as part of the Area 7 agency which is run by the Highways Agency. 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 and one strategic salt store in the County. The operational depots are located at Sturton by Stow, Willingham Hall, Manby, Horncastle, Ancaster, Thurlby, Chainbridge and Pode Hole with the strategic store at Great Steeping. The Salt specification is 3 or 6 mm high purity salt at all depots, to enable pre-wet operations.

2. Policy

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 Appendix WMP/2/HM21-1).**
- 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 secondary route network or the footway networks. The Director of Development 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 so called secondary 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 Secondary Route Network as defined in HM35.

3: Footways in accordance with HM24.

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 secondary network 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 Appendix WMP/2/HM24-1 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 in conjunction with Highways Agency installed nine remote weather stations at sites which cover the different climatic zones within Lincolnshire, of which 6 are used for forecasting. Information from these sites is supplemented by information from adjacent sites 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 1st October to 30th 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 a Duty Officer on duty in each of the four Divisional Offices, 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 secondary 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 within 1 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**
- 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 9m³**
 - **3 x 4m³**
 - **3 x 2m³**
- **5 spare pre-wet 9m³ gritters (2 for North Division and 1 each for East, West and South)**
- **12 towed or demountable trailer gritters (for use in Severe or Extreme winter weather)**
- **3 snow blower attachments**
- **48 snow ploughs**
- **9 Operational centres at which spreaders and salt supplies will be based**
- **At the start of each winter season there will be 23 000 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 Appendix WMP/2/HM31-1

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.

Appendix WMP/16/1 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 [Appendix WMP/2/HM34-1](#)

HM35: Only during periods of Severe or Extreme Winter Weather will the treatment of Secondary Routes will be considered when resources permit. The Secondary 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 secondary 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 secondary 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 Hosprital 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 Service Development	Divisions	Contractor	Fleet Operator
Policy	Policy	Operating policy		
Standards and Planning	Standards	Planning- Input of Local knowledge	Planning- Input of Drivers knowledge	Maintenance of Fleet to appropriate standards as specified in fleet contract.
	Planning of Routes	Secondary route planning	Providing all available resources in emergency conditions.	Providing all available resources in emergency conditions.
	Road priorities	Footway salting planning		
	Approve additions to the Salting network	Recommendations for route additions		
	Snow route planning			
	Routing to meet Audit Commission targets			
	Driver Training			
Winter Maintenance Plan	Staff procedures	Duty Rota	Driver Rota	Allocation of vehicles
	Staff responsibilities	Secondary Route Maps	Plant and vehicle manning arrangements	Fleet Inventory, including Licence requirements
	Primary Route Maps	Footway salting procedures	Fuel stocks	Location of vehicles
	Calibration process	Salt Bin Procedures	Loading arrangements	Garaging, services and maintenance arrangements.
	Snow Clearing Procedures	Salt Stocks	Vehicle communications	
	Weather forecast and information procedures	List of ploughing contractors		
	Organisational Charts	Depot Maintenance		
	Location of fleet	Weekly Gritter checks		
	Salt Testing arrangements	Winter Maintenance yearly rally		
	Salt Supply Contract.			
	Information and Publicity			
	Training Procedures			
Operation - Precautionary Salting	Out of Hours Staff	Monitoring of weather forecast during working hour	Preparing Gritters in under 1 hour ready for run.	Provide a Rota of Duty Fitter.
	Weather Forecasting and Monitoring			

Assets, Resources and Network Management	HeadQuarters (Service Development)	Divisions	Contractor	Fleet Operator
	Monitoring Fleet Movements Associate equipment and software	Maintenance and refilling of brine equipment Decision Making Let Neighbouring Authorities know of decision. Informing contractor and HQ staff about decision.	Calling in drivers Loading Gritters Completing run in under 4 hours.	
Operations- Secondary Routes	As above	Inform contractor of decision to run secondary's	As above	As above
Operations - Snow Clearance	Open Snow Room if weather deteriorates OHDO's to be double manned. Liase with Police and Public Liase with all Divisions involved Inform the media	Contact Translinc about forecast. Contact HWTC about fitting ploughs and extra staff Contact ploughing Contractors Liase with local snow control and report network conditons. 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 Contractor to put staff in Divisional Office for 24 Hour operation	Prepare snowblowers Filters on standby

4. Decision Making Process

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 'IceMan' 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.

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

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 Engineers representative regardless of the time of day or night that the instruction is given. The Contractor shall ensure that all manpower engaged upon these operations can achieve this specified response time.

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.

Decisions will only be made by members of staff who comply with HM26.

Decisions will be made using the 'Precautionary salting Flow Chart' and will also take into account other factors including:

- Any expected residual salt level based on professional experience.
- Based on the professional guidance from the Met Office, the decision to treat only part of the priority network can be taken.
- 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 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.
- 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. This could be altered in accordance with any national standards that may be developed for snow conditions.

6. Precautionary Salting

- 6.1. Roads off the Priority Road 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 secondary 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 Service Development (including the OHDO) and Divisional staff will have access to 'IceCast' and 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.

7. Snow Clearance Operations

- 7.1. Lincolnshire County Council has a statutory duty under Section 150 of the Highways Act to remove obstructions. Snow is considered to be an obstruction when it impedes the use of the road network.
- 7.2. The Met Office will provide National Weather Warnings if any sizeable accumulations of snow are expected.
- 7.3. When snow is forecast advanced salting at 20g/m² Dry will take place on the precautionary salting routes. Time permitting a further run may be carried out to increase salt coverage to 40g/m² Dry. Pre-snow salting may be considered for secondary routes.
- 7.4. Division which may be affected by the snow will contact Translinc 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 rubbers 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.
b.) **Light Snowfall** - (up to 50mm) will be dealt with by additional salting unless drifting occurs.
- 7.6. When snowfalls are forecast that could create plough-able conditions (50mm or greater) the 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
- 7.7. When heavy snowfalls are 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/m² Dry so that a wet base can be maintained. Once the snow depth has reached 120mm 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. (ie:- 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 there 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 Service Development 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 secondary 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) Secondary 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 HM24.
- 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 crossing.
- 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) Service Development 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 Met Office 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 – Divisional Highways Managers 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 Divisional Highways Manager should be aware of such action.
- 8.4. Snow Clearing operations based on the non priority network will be co-ordinated 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 secondary 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 Engineering Team. The "Daily Plant Returns (Snow Clearing)" (Appendix WMP/8/1) and the "Hired Plant" summary forms (Appendix WMP/8/2) 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 Engineering Team. The Engineering Team will complete form (Appendix WMP/8/3), provide copies for the Divisional Highways Manager and fax/email a copy to HQ Maintenance Section as soon as possible after 0900hrs. The Engineering Team will at the same time complete the road condition report (Appendix WMP/8/4) 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 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 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 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 Director of Development 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 Development Directorate
 2. Lincolnshire Police
 3. Lincolnshire Fire Brigade
 4. Health Authority 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.
- 9.4. The Police will inform the Development Directorate, when the actual/expected levels of public calls becomes 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 [APPENDIX WMP/9/1](#)).
- 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 [APPENDIX WMP/9/1](#)). 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 persons 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 Divisional Highways Managers 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 Divisional Highways Manager to arrange reallocation of resources. In an emergency situation, after the initial reaction has been dealt with then the Director of Highways and Planning must be informed of any changes in the situation and the final outcome.
 - 9.1. **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 Divisional Highways Managers, Director of Development or members of the DMT of the Development Department. 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).

11. Weather Forecast Service

11.1. Routine forecasts and updates will be issued by the Met Office via the IceCast system in each Division and in Highways Service Development. Also IceNet is available on the internet in the following format:

- (a) 1100hrs MAIN FORECAST
A summary 24 hour forecast for the County
Detailed forecast for each of the 6 climatic zones:
The Lincoln Ridge
Trent Valley
The Wolds
Coastal Area
The Grantham Area
The Fenland Area
- (b) 1800hrs EVENING UPDATE
An update for the overnight period for each of the six climate zones.
- (c) If significant changes take place then the forecast is amended.

11.2. AMENDMENTS

The Met Office will amend the forecast at any time:

- 11.2.1. 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.
- 11.2.2. When there are significant changes to rainfall intensity and timing and road frost is expected or significant changes to snowfall is forecast.

As well as updating the IceCast system, the Met Office 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.

11.3. CONSULTANCY SERVICE

11.4.

A 24 hour consultancy service is provided by the Met Office available to all client staff.

NB. In the event of the IceCast system not operating, the above forecasts will be faxed to HQ by the MET Office 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 Ice Cast 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:
 - 12.8.1. 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 (ie most situations).
 - 12.8.2. 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 winter maintenance contractor in contacting Translinc 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 IceMan system as required.

- 12.12. Contact Translinc Fleet officer (Monday to Friday only) and pass details of Winter Maintenance vehicle defects. Saturday and Sunday pass defect details to appropriate Translinc Duty Fitters.
- 12.13. Enter Winter Maintenance site details (forecast, temperature, salting decisions) from Ice Cast and Site instructions into WINTEMP 2.
- 12.14. To check routes have been completed correctly on the Gritter Tracking systems.

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

13.1. Rising Road Temperatures Prior to Precautionary Run Commencing

If actual road temperatures deviate from the forecast line by $+1^{\circ}\text{C}$ and the forecast minimum is 0 to -1°C and a decision has been made to treat. Contact the Met Office 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°C and the forecast minimum is $+1^{\circ}\text{C}$ contact the Met Office 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 Met Office: 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 Met Office: 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 Met Office: 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

14.1. Weather Station Not Registering.

14.1.1. Check with the Bureau at Vaisala on 0121 683 1269 to make sure that the problem is not at their end.

14.1.2. 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.

14.1.3. 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.

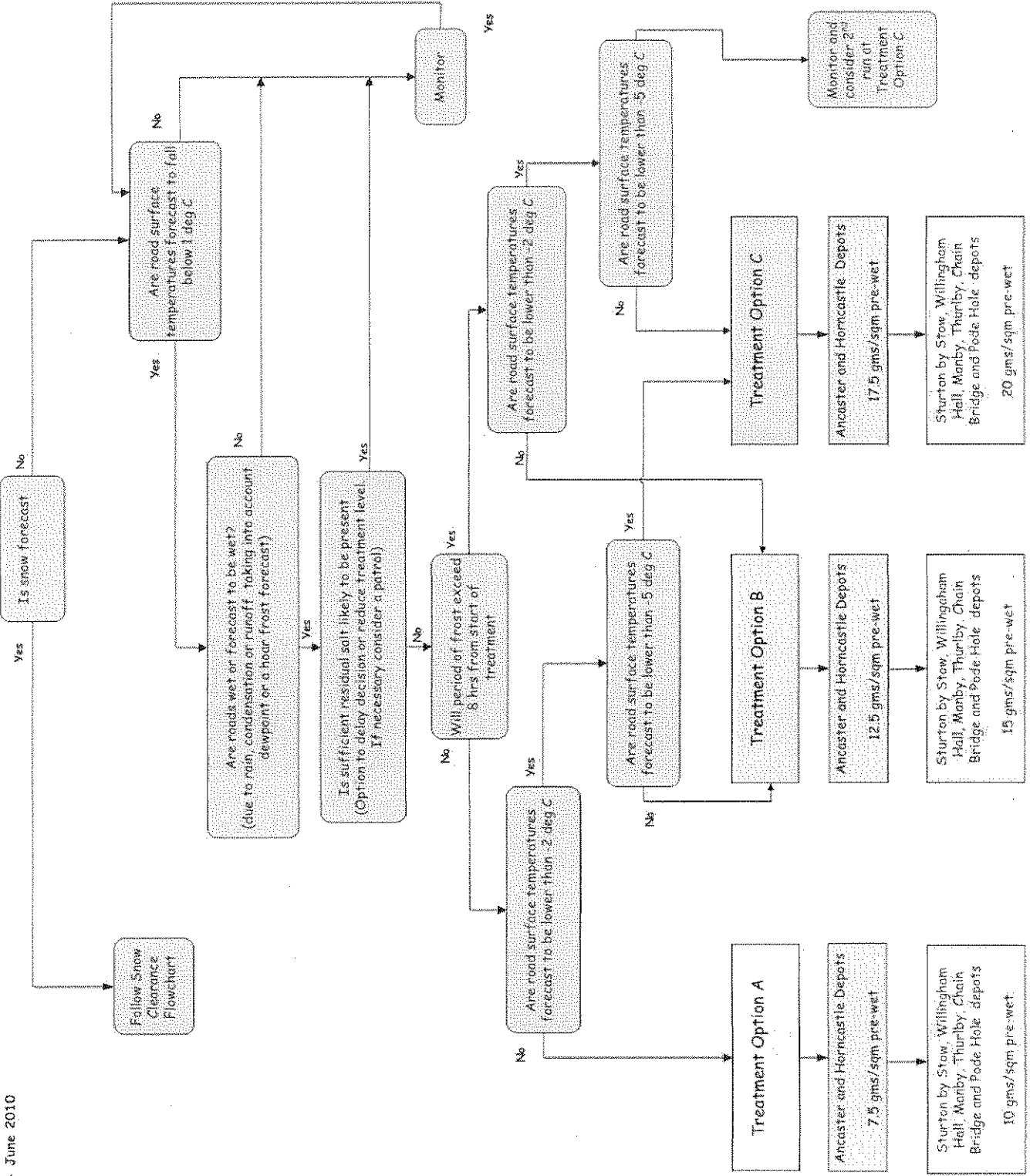
(b) At all other times report fault to the Highways Service Development Maintenance team the following working day.

15. Precautionary salting flow chart

LINCOLNSHIRE COUNTY COUNCIL - PRECAUTIONARY SALTING FLOWCHART

HIGHWAYS & TRAFFIC

DRAFT - June 2010

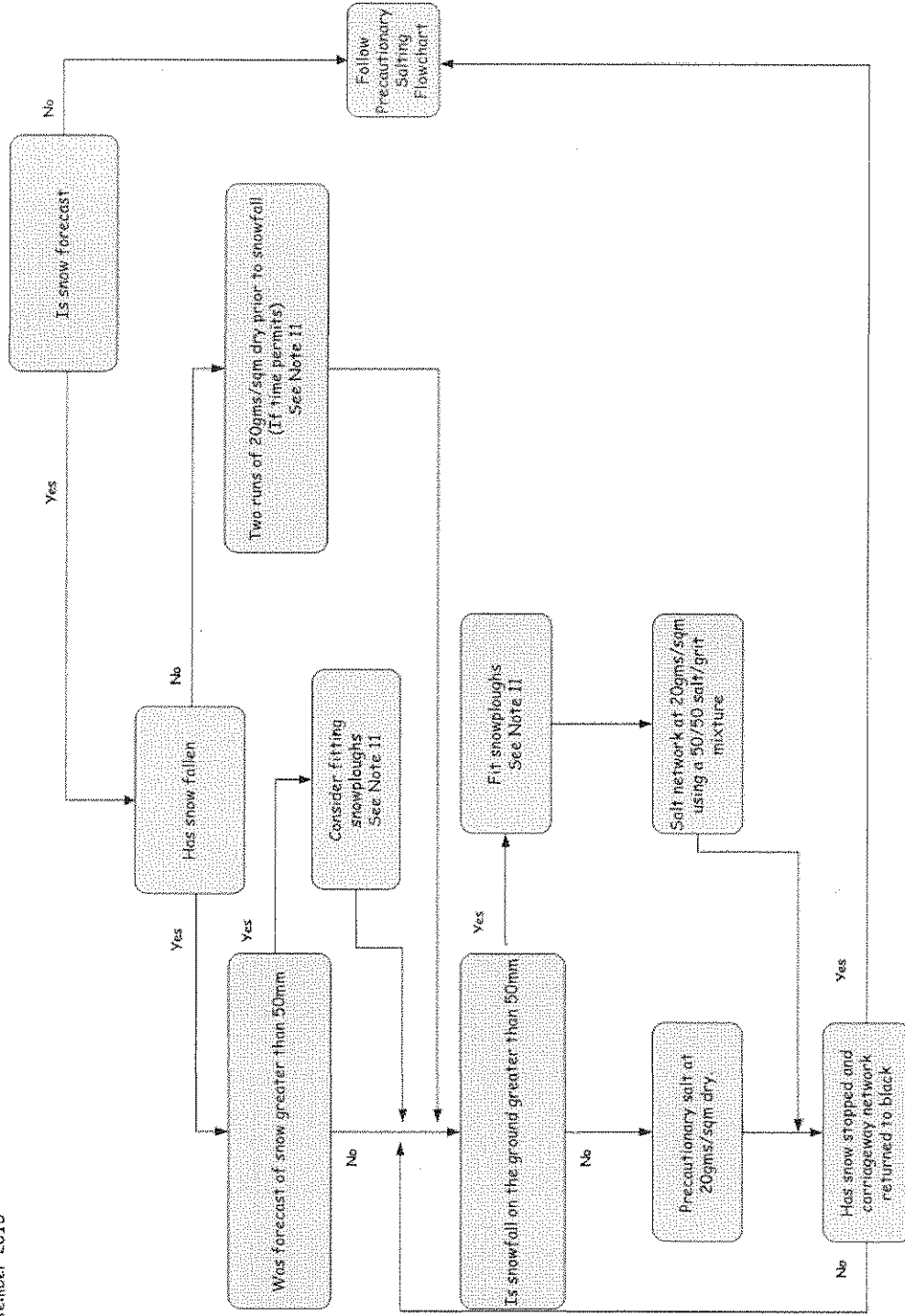


Notes:

- 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 - If treatment is completed before 2200hrs and the forecast is for RST's -2 or less with moisture/hour frost present and forecast still below freezing for a further 10 hours or more, consider re-treatment to complete runs by 0700hrs.
- 5 - Dry Salting - If brine is not available then add 5 gms/sqm to the above figures and dry salt. Note MAXIMUM spread rate 20 gms/sqm.
- 6 - 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%.
- 7 - Ancaster and Horncastle depots run with a 10% mixture of Safecote in the brine and so treatment rates reduced by 2.5 gms/sqm.
- 8 - At Horncastle and Willingham Hall depots when the salt is sheeted down with Drystone the salt is considered to be covered. If the salt is not covered then note 6 will apply.
- 9 - 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.
- 10 - Decision Matrix based on research carried out by TRL for Highways Agency and the NW/SR6 as well as guidance contained within Well - Maintained Highways Code of Practice for Highway Maintenance Management.

15. Snow Clearance Flowchart

LINCOLNSHIRE COUNTY COUNCIL - SNOW CLEARANCE FLOWCHART
 HIGHWAYS & TRAFFIC
 DRAFT - September 2010



Notes:

- 1 - When snow ploughing is ongoing divisions are to set up snow rooms to control operations.
- 2 - County snow room will be set up in Extreme Winter Conditions cases in accordance with LRF procedures.
- 3 - During 24 hour snow clearing operations divisions are to liaise with Transline 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 - 6mm 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 into 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 a pre-wet operation prior to snow or emptied into brine facility bund walls and re-circulated.
- 12 - Secondary Winter Routes should only be treated during daylight.

16. Cross Boundary Procedure

- 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.

The current cross boundary arrangement with neighbouring authorities are as follows:

- o North Lincolnshire
- o Nottinghamshire
- o North East Lincolnshire
- o Leicestershire
- o Rutland
- o Peterborough
- o Cambridgeshire

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.

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.
-

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.

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.

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.
- B1524 from County Boundary to B1525 roundabout.

Roads gritted by Lincolnshire County Council on behalf of Peterborough CC

- A15 from A16/ B1525 roundabout across County Boundary to A15/ B1524 roundabout.

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.

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.

Road gritted by Cambridgeshire on behalf of Lincolnshire County Council

- N/A

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.

Road gritted by Leicestershire on behalf of Lincolnshire County Council

- C427 from County Boundary (north east of Normanton) to Long Bennington C418 Main Road.

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.

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

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.

Dear

Winter Maintenance 2009/2010 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

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 normal working hours.	Snow removal will commence when resources come available from higher priority treatments. Endeavours will be made to commence clearance within 5 days of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
4	No treatment	No treatment		

Notes

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

APPENDIX WMP/2/HM21-1

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
Kirtton
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
Tetney
Wainfleet
Woodhall Spa
Wragby

NORTH KESTEVEN DISTRICT

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

SOUTH HOLLAND DISTRICT

Cowbit
Deeping St Nicholas *
Donington
The Drovers (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

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 Point Score =					

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	
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Engineering Comment.	
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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 footway treatment	
Road name and number –	

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 -		If No – do not proceed

Item	Notes	Points Carriageway	Points Footway	Total
Gradients	<ul style="list-style-type: none"> Greater than 1 in 20 1 in 20 to 1 in 30 Less than 1 in 30 	75 0 0	75 40 0	
Proximity of existing grit bin	<ul style="list-style-type: none"> Within 50m 50 – 100m 100 – 200m Greater than 200m 	-100 -50 0 30	-100 -50 0 30	
Number of premises for which this is the only access route	<ul style="list-style-type: none"> Over 50 20 – 50 Less than 20 	30 20 0	30 20 0	
Community facilities (within 200m of proposed grit bin)	<ul style="list-style-type: none"> School (Not directly on treated network) Post Office/local shop Local shopping centre Community/Medical Centre 	20 10 20 0	30 20 30 10	
Winter route priority of location of proposed grit bin.	<ul style="list-style-type: none"> On Priority Gritting Network On Secondary Gritting Network Not on gritting network 	-200 -100 20	NA NA NA	
IN ORDER TO PROVIDE A GRIT BIN, SCORE MUST EXCEED "X" POINTS X = to be agreed by Exec Cllr for Highways & Transport			TOTAL POINTS	

Greater Lincoln and Gainsborough 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

APPENDIX 28/6 - Road Condition Report (Example)

A	(ALPHA)	2 Way	Open to all traffic	Black tarmac
B	(BRAVO)	2 Way	Open to all traffic	Soft snow slush ice lying on road surface
C	(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)	Blocked Road	BLOCKED ROAD Generally impassable to all traffic	Drifts of fresh snow up to 600mm deep. Left mounted plough can widen to 1 lane.
H	(HOTEL)	Blocked Road	BLOCKED ROAD Generally impassable to all traffic	Drifts over 600mm

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

Priority Snow Clearing Routes

Date:
 Time:

Police Sub-division "B"

Route Status Key			Weather Status			
A	(Alpha)	2 Way	1	2	3	4
B	(Bravo)	2 Way	1	2	3	4
C	(Charlie)	Single	1	2	3	4
D	(Delta)	Blocked	1	2	3	4

Open to all traffic
 Snowed over no artics
 Snowed over no artics
 Road generally impassable to all vehicle access

Ref	Road	Location	Route Status				Weather Status
			A	B	C	D	
W01	A15	from A16					
W02	A15	from A16					
W03	A15	from A151					
W04	A15	from A152					
W05	A15	from A153					
W06	A15	from A17					
W07	A15	from B1202					
W08	A17	from A607					
W09	A17	from A15					
W10	A17	from A15					
W11	A52	from A1					
W12	A52	from A1					
W13	A52	from B6403					
W14	A52	from A15					
W15	A607	from A152					
W16	A607	from A152					
W17	A153	from A607					
W18	A153	from A15					
W19	A151	from A1					
W20	A6121	from A16					
W21	A16	from A43					
W22	A16	from A15					
W23	A1	from A15					
W24	B1188	from A153					
W25	B1189	from A153					
W26	B1177	from A15					
W27	B1394	from A17					

ACTIONS FROM HTT&T SCRUTINY REVIEW

	Recommendation	Action
1	We recommend that winter maintenance service information, for example the tables on pages 8 (The Number of Precautionary Salting Callouts and Snow Days) and 14 (Winter Salt Usage), be made freely available to Councillors, so that they can explain to their communities the particular role of the service.	Will be actioned for the 1 st November 2010 the start of the High Risk winter maintenance season.
2	<p>In relation to the treatment of footways in severe weather, we recommend that</p> <p>(a) officers explore with district and parish councils the possibility of redeploying operatives from other activities to assist the clearance of snow and ice from footways. As part of this process consideration should be given to holding a local conference to engage with Members and other local partners; and</p> <p>(b) the hierarchy of footways in and around public transport interchanges are reviewed and where possible considered to be, in times of severe weather, in the category of 1A footways so that they will be treated at more frequent intervals.</p>	<p>Divisional Highway Managers are in correspondence with District Councils. Discussions have started with Health Authority.</p> <p>Area Highway Teams are reviewing footways hierarchies.</p>
3	<p>In relation to salt/grit bins, we recommend:</p> <p>(a) a sand and salt mix should be used for the filling of these bins;</p> <p>(b) a scoring matrix should be introduced for assessing where salt/grit bins should be located and this matrix should be applied retrospectively to all bin stores;</p> <p>(c) a leaflet or guidance note should be prepared for parish and town councils outlining the insurance arrangements.</p>	<p>Contained with HM28</p> <p>Contained within HM34 and Appendix WMP/2/HM34-1. Area Highway Teams are carrying out reality checks on system.</p> <p>DfT has been required to prepare a national leaflet</p>
4	<p>We recommend that</p> <p>(a) options for extending the working life of spreading vehicles be considered; and</p> <p>(b) the lease arrangements for the gritter fleet be reviewed with a view that risk sharing be more equitably spread.</p>	Meetings have taken place with Translinc the lease provider and Bunce/Epoke the suppliers and work is ongoing on both actions.
5	<p>We recommend that</p> <p>(a) the existing policy of retaining 23,000 tonnes of salt in store be retained; and</p> <p>(b) the possibility of creating a regional reserve salt store in Lincolnshire be explored with other adjacent authorities.</p>	<p>Will start this winter season with 30,000 tonnes in stock.</p> <p>The Highways Agency has been tasked with keeping a national reserve this winter.</p>

6	We recommend that officers consider how the salt storage arrangements at Willingham Hall and Horncastle might be addressed, in order to take account of the potential for the Environment Agency to seek compliance with its Pollution Prevention Guidelines for Highways Depots.	No progress on this issue to the budgetary situation. However all open stored salt will be sheeted over.
7	We recommend that the options for using alternative sizes of salt granules and mixtures, for example salt and sand or expanding the use of molasses/ sugar mixes, are explored.	Contained within HM23 and HM28
8	We recommend that the Winter Maintenance Plan includes, in addition to the definition of <i>Severe Winter Weather</i> , a definition of <i>Extreme Winter Weather</i> , with <i>Extreme Winter Weather</i> leading to the activation of the Lincolnshire Resilience Forum.	Contained within HM23
9	We recommend that the procedures for decision making are reviewed, in partnership with the new contractor.	Procedures have been developed with May Gurney.