BEDFORD BOROUGH COUNCIL

Bedford Borough Council Winter Service Policy & Operational Plan



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1. Document Circulation List

1.1. The following organisations will receive an emailed .pdf version of this Plan

- Central Bedfordshire Council
- Bedfordshire Police
- Luton Borough Council
- Cambridgeshire County Council
- Milton Keynes Council
- West Northamptonshire Council
- Ringway Jacobs Area 6&8 (National Highways)

2. Introduction

2.1. Background

Within Bedford Borough Council the service is delivered through our Highways Department

The Winter Service deals with regular, frequent and reasonably predictable occurrences like low temperatures, ice and snow, as well as exceptional weather events.

Although a specialised area, the Winter Service is a significant aspect of network management both financially and in terms of its perceived importance to road users. It can also have significant environmental effects.

2.2. Objectives

The Winter Service can contribute significantly to each of the core objectives set out in the Code of Practice – Well managed highway infrastructure as described below:

Customer

There is in Bedford Borough, 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

Safety is a consideration for the Winter Service, even though statutory obligations and users' needs vary.

Serviceability

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

Sustainability

Low temperatures and the formation of ice can cause serious damage to the fabric of running surfaces and accelerated damage to the network. An effective Winter Service can contribute to a reduction in whole life costs.

3. Key Issues

3.1. Legal

Bedford Borough Councils duty to maintain the highway is set out by Section 41 of the Highways Act 1980 as amended by S111 of the Railways and Transport Safety Act 2003 (which came into force on 1 November 2003). This duty is not an absolute duty.

This amendment inserted after section 41(1) of the Highways Act 1980 (c. 66) (duty of highway authority to maintain highway) the following requirement: "(1A) In particular, a highway authority is under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow and ice".
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.

Through the adoption of this Winter Maintenance Policy and Operational Plan the Council is able to demonstrate that they are meeting their current legal obligations, and are doing so in a way which ensures that their resources are being deployed in the most economic, efficient, effective and environmentally friendly manner.

3.2 Policy and Guidance

Well-managed highway infrastructure (Code of Practice for highway maintenance management) issued in October 2016 recommends that a highway authority 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.

It goes on to recommend that Authorities should develop local service levels for Winter Service which define the Overall Winter Period, the Core Winter Period, the level of resilience and treatment networks, prepare a Winter Maintenance Policy Statement, produce a Winter Service Operational Plan and update it annually.

3.3 Resource

Bedford Borough Council as the Highway Authority, is responsible for providing all aspects of the winter service including decision making, supervision and monitoring of winter maintenance activity, ownership, operation and maintenance of the winter maintenance fleet.

To deliver the service within the available resources, the precautionary salting routes reflect the importance of the various traffic routes and are adaptable to the prevailing weather conditions.

Funding for the winter maintenance precautionary salting service based on a 'normal' winter period is provided via a ring-fenced revenue budget. The occurrence of severe weather conditions which necessitates additional snow clearance to be undertaken may require consideration to be given to providing additional resources to maintain the service; this is usually through a call on general contingency funds.

As the winter season moves forwards, salt is replenished through an existing contract with Compass Minerals.

3.4 Risk and Resilience

In the event of severe winters it is possible that there will be a national shortage of salt supplies, with Government dictating how salt supplies are allocated. If this happens then the Council may be required by Government to reduce the number of roads that are treated in anticipation of ice.

Bedford Borough Council has a robust stock management system in place since it moved its salt stock to London Road depot to ensure 5 days resilience at 6 runs per day which is extreme usage.

There may also be other influencing factors that may affect the ability to treat the network of roads salted in anticipation of ice. These factors include;

- Health pandemics affecting the available labour force
- Fuel shortages

3.5 Environmental Implications

A balance needs to be made between the ever-increasing demands for wider coverage of the network in terms of salting and the cost and environmental effects of doing so.

The value of keeping roads open and relatively safe in icy conditions using salt is widely acknowledged. If roads are not cleared, the impact of accidents and increased fuel consumption are likely to be significant in environmental and economic terms.

The rock salt that is used as part of the Winter Service is a natural herbicide and will cause damage to flora and fauna as well as causing damage to concrete structures over time. An effective Winter Service can contribute to a minimisation of damage to the environment.

3.6 Equalities Impact

Increasing the robustness of the winter maintenance service can ensure that the priority highway network is available for all to use during periods of adverse weather.

4. Decision Making and Control Procedures

4.1. Responsibilities

Decisions on when to salt are made by Highways Duty Managers in accordance with our Winter Service Policy.

The council maintain Icelert monitoring stations across our administrative area.

There is a set decision making progress as set out in this plan. Decisions are taken daily and communicated to relevant parties including the Councils Highways Team who carry out salting.

Bedford Borough Council staff updates the Gritter Twitter feed with planned actions.

4.2. Treatment Decisions

Appendix A highlights the major decisions that are involved in respect of the winter maintenance service.

Current arrangements on the criteria taken into account and decision-making process on when to carry out precautionary and reactive winter maintenance are based on national best practice as described in the Code of practice, Well Managed Highway Infrastructure.

The process of communicating and actioning treatment decisions is outlined opposite.

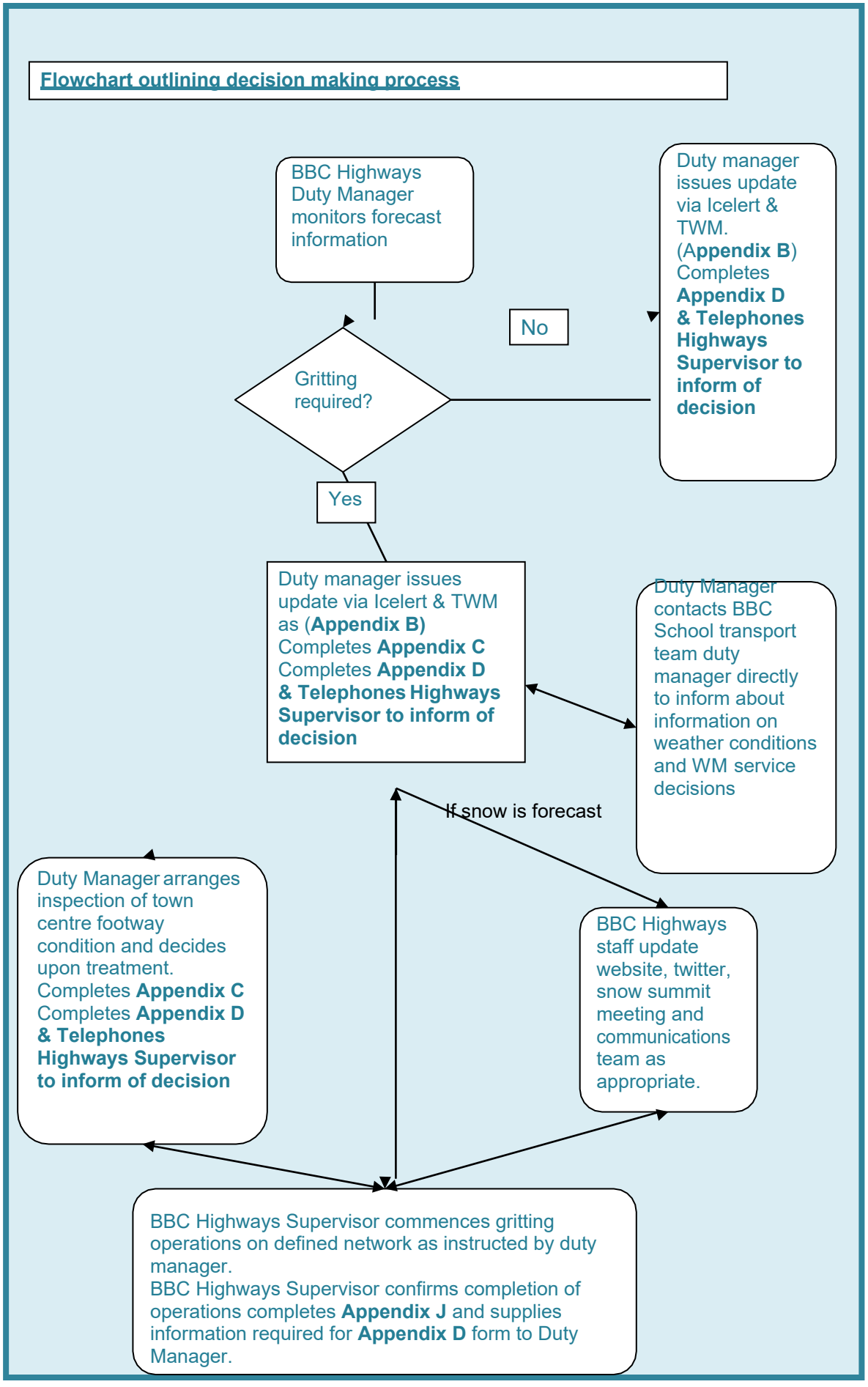
The decision-making process as to whether or not to carry out some form of winter maintenance action is carried out by nominated duty managers. These officers form a duty rota to cover the whole of the winter period.

All duty managers are required to have received basic weather forecast training prior to commencement of the role. Further refresher training will be made available where appropriate. In addition to this the duty manager will receive an annual briefing on the use of the Transport Weather Manager Bureau.

A procedure for notifying winter maintenance action decision making and communication is as given in Appendix B.

The form shown in Appendix D is completed and filed electronically by the duty manager.

Flowchart outlining decision making process



The duty manager may request additional information concerning residual salt to assist decision making as to any action required. The form to be used is attached at Appendix F.

Decisions made throughout the winter maintenance period are recorded using the form shown in Appendix C.

For allocating treatments a distinction is made between dry, damp and wet road surfaces. The following definitions for road surface wetness should be used when making the treatment decision.

Road Surface Wetness	
Dry road	A road that shows no signs of water or dampness at the surface but may be just detectably darker (however it may have moisture contained in pores below the surface that is not 'pumped' to the surface by traffic)
Damp road	A road which is clearly dark but traffic does not generate any spray. This would be typical of a well-drained road when there has been no rainfall after 6 hours before the treatment time.
Wet road	A road on which traffic produces spray but not small water droplets. This would be typical of a well-drained road when there has been rainfall up to 3 hours before the treatment time

The decision matrix for precautionary treatments based on road surface conditions and predicted weather conditions is given in table opposite.

After treatment has taken place, it may be required to carry out network checks to ensure treatment has been effective, particularly in respect of transport routes to schools in accordance with the Councils

<table>
<tr><th colspan="4">Precautionary Treatment Decision Matrix</th></tr>
<tr><th rowspan="2">Road Surface Temperature</th><th rowspan="2">Precipitation</th><th colspan="3">Predicted Road Conditions</th></tr>
<tr><th>Wet/Damp</th><th>Wet Patches</th><th>Dry</th></tr>
<tr><td>May fall below 0.5°C</td><td>No rain
No hoar frost
No fog</td><td rowspan="3">Salt before Frost</td><td rowspan="2">Salt before frost (see note a)</td><td rowspan="2">No action likely, monitor weather (see note a)</td></tr>
<tr><td rowspan="5">Expected to fall below 0.5°C</td><td>No rain
No hoar frost
No fog</td></tr>
<tr><td>Expected hoar frost
Expected fog</td><td colspan="2">Salt before frost (see note b)</td></tr>
<tr><td>Expected rain BEFORE freezing</td><td colspan="3">Salt after rain stops (see note c)</td></tr>
<tr><td>Expected rain DURING freezing</td><td colspan="3">Salt before frost, as required during rain and after rain stops (see note d)</td></tr>
<tr><td>Possible rain
Possible hoar frost
Possible fog</td><td colspan="2">Salt before frost</td><td>Monitor weather conditions</td></tr>
<tr><td colspan="2">Expected snow (See Section H10 of revised issue of Well Maintained Highways)</td><td colspan="3">Salt before snow fall</td></tr>
<tr><td colspan="5">The decision to undertake precautionary treatments should be, if appropriate, adjusted to take account of residual salt or surface moisture. All decisions should be evidence based, recorded and require continuous monitoring and review.</td></tr>
</table>

Notes

(a) Particular attention should be given to the possibility of water running across carriageways and other running surfaces e.g. off adjacent fields after heavy rains, washing off salt previously deposited. Such locations should be closely monitored and may require treating in the evening and morning and possible other occasions.

(b) When a weather warning contains reference to expected hoar frost, considerable deposits of frost are likely to occur. Hoar frost usually occurs in the early morning and is difficult to cater for because of the probability that any salt deposited on a dry road too soon before its onset, may be dispersed before it can become effective. Close monitoring is required under this forecast condition which should ideally be treated just as the hoar frost is forming. Such action is usually not practicable, and salt may have to be deposited on a dry road prior to and as close as possible to the expected time of the condition. Hoar frost may be forecast at other times in which case the timing of salting operations should be adjusted accordingly.

(c) If, under these conditions, rain has not ceased by early morning, crews should be called out and action initiated as rain ceases.

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

(e) Weather warnings are often qualified by altitudes in which case differing action may be required for each route.

(f) Where there is any hint of moisture being present, a pessimistic view of the forecast should be taken when considering treatment to newly laid negatively textured surfaces.

4.3. Dealing with requests for adding roads to the Priority 1 network

Requests for roads to be added to the Priority 1 Network will be considered as part of each annual review of this Plan.

Such requests will be considered bearing in mind the definition of the Priority 1 network as defined in section 4.3.2 and assessed using the scoring process attached in Appendix G.

It should be noted that any significant amendments to the Priority 1 network may have implications upon the number of salting vehicles and drivers available together with performance management targets for delivering Winter Maintenance service as defined in the Plan.

A record will be kept of all requests and assessments scores to be considered as part of each annual review of this operational plan.

4.4. Dealing with requests for extra salting to that planned or underway

During normal precautionary salting operations, requests for salting off of the Priority 1 network are normally received from two sources, either from the public and Town / Parish Councils, or from Bedfordshire Police Control Room.

i) The public and Town / Parish Councils

Such requests for salting off of the Priority 1 network should be firmly resisted. The normal precautionary salting service should be explained using the annual winter maintenance publicity for reference. Driver advice can be given depending on the situation of the request.

ii) Bedfordshire Police Control Room

Generally, requests from the Police for salting off of the Priority 1 network are made as a result of reported road traffic collisions, normally on the Priority 2 network.
Consideration should be given to carrying out salting off of the Priority 1 network using the following parameters as a guide.

- Scope of problem, e.g. number and severity of reported accidents.
- Availability of resources e.g. are winter maintenance vehicles already out salting the Priority 1 network.
- Time of request from Police.
- Time needed for a vehicle to attend and treat the site.
- Whether road surface temperatures (RSTs) are expected to remain below zero for some time.

- Time RSTs are expected to rise above zero.
- Expected precipitation.

It is important that records are retained of decisions made under this procedure, including the thought process used. This should be recorded on the form detailed at Appendix H.

4.4. Snow Summit meetings

During periods of extreme snow event Bedford Borough Council convenes snow summit meetings to ensure proper coordination and communication of decisions. The group consists of the
The Mayor; Portfolio Holder for Environment; Chief Executive; Director for Environment, Chief Officers / Managers for Highways, Transport and Environment, Communications and IT.

The group may also issue revisions to this policy and operational plan.

5. Service Provision

5.1. Winter Maintenance Period

For the purposes of winter maintenance planning the winter maintenance season runs from 23rd October 2020 to 15th April 2021. The table below highlights the relative risk at the differing points throughout the season.

Risk Period	Definition	Time	Weather conditions
High	A period of standby to ensure salting starts within one hour of instruction. Possibly continuous 24-hour operations.	December, January, February	Severe – probable
Medium	A period of standby with rare possibility of continuous 24-hour operations	November and March	Severe – may occur
Low	Call out	October and April	Severe – not expected

5.2. Precautionary salting – Treatment before the onset of freezing conditions

Spread rates for precautionary treatments before frost are replicated below.

The NWSRG have published guidance on Spread rates. These supplement the previous guidance in H6.20 of Appendix H. The advice given is that the recommended spread rates should be increased by 20% for uncovered salt stockpiles. Spread rates for the BBC area, used in this table are in accordance with those recommended.

Frost or forecast frost Road Surface Temperature (RST) and Road Surface Wetness	Normal spread rates
RST at or above -2˚C and dry or damp road conditions	8
RST at or above -2˚C and wet road conditions	15
RST below - 2˚C and above -5˚C and dry or damp road conditions	15
RST below - 2˚C and above -5˚C and wet road conditions	20

RST at or below - 5˚C and above -10˚C and dry or damp road conditions	30
RST at or below - 5˚C and above -10˚C and wet road conditions	2 x 30

NOTE: The following points must be considered when using the spread rate tables.

1. The given spread rates are for sections of well drained roads without ponding or runoff from adjacent areas.

2. The rates may be adjusted to take account of variations occurring along routes such as temperature, surface moisture, road alignment and traffic density.

3. The rates may be adjusted to take account of residual salt levels and H8.25 of Appendix H lays out guidance in this respect. (see below)

4. All decisions should be evidence based, recorded and require appropriate monitoring and review.

5. During periods of sustained freezing and if surfaces are well drained and there is neither seepage (from melt water) nor ice present, rates of spread for treatments carried out within six hours of previous treatments may be 50% of the rates stated in the appropriate table.

6. High Winds –during periods where the wind speed in excess of 20mph, salting is not recommended.

Residual Salt

Section 8 of the NWSRG guide on Spread rates makes the following recommendations

In favourable conditions it is likely that some salt will remain on road surfaces for a considerable period following treatment and, for example, residual salt levels on the network may build up if there are treatments on successive days and no precipitation occurs.

In these situations, where the level of residual salt can be accurately assessed and confirmed as being present, this can be taken into account when determining the need for, the timing of, and the appropriate spread rates to utilise, in further precautionary salting operations.

However, the combined action of traffic and weather conditions, especially precipitation, reduces residual salt levels over time, and the rate at which these losses occur may vary markedly across the road network. Residual salt levels across the network are also notoriously difficult to measure accurately and this issue is still very much in focus as an area for ongoing and future research.

Therefore, authorities should carefully consider whether or not they will take residual salt levels into account during the winter service decision making process and, if so, the precise circumstances when they will do so, as well as the information sources they will rely upon to ascertain, confirm and monitor residual salt levels on their networks. For example, these could potentially include: direct network observations; available data from road weather

stations: the length of time since previous treatments took place, and the weather and traffic conditions that have occurred since that time; coupled with the local experience of authority staff.

The potential to take account of existing residual salt levels when considering further operations is greatest on 'marginal' nights, when road surface temperatures are close to zero Celsius and relatively little salt is needed to ameliorate the risk of frost and ice formation.

If considered, it is crucial that the information utilised regarding existing residual salt levels is reliable. In this regard it should be noted that the types of surface sensor typically utilised by road weather outstations are only effective when moisture is present on the sensors, and these only provide information relating to a small area of the road surface so may not accurately reflect residual salt levels across a larger part of the network. Primarily, the consideration of taking existing residual salt levels into account is dependent on an assessment requiring good knowledge of the routes in question, as well as the experience of the decision maker.

Authorities should keep full and accurate records of their winter service activities, and it is important that these incorporate all relevant details of the decision-making process and the information utilised and relied upon. This should include specific reference to information relied upon relating to existing residual salt levels.

Negatively Textured Surfacing (NTS) was widely used between 2005 and 2007 but since then Hot Rolled Asphalt has tended to replace NTS. Therefore lengths of NTS are slowly diminishing over time as they are being resurfaced.

A decision to consider residual salt in making a decision whether to salt or not will only be taken when the air humidity is forecast to be dry, the dew point temperature is predicted to remain below the road surface temperature, and the road is forecast to remain dry. Also, that these parameters are predicted to remain as such throughout the forecast period.

Before a decision is taken; a) not to carry out a salting action due to residual salt or
b) to carry out a salting action at a reduced spread rate due to residual salt, then a visual inspection will be undertaken on a representative sample of existing NTS sites on the Priority 1 network. These sites are;

Site	Extent	Material
A6 Clapham Bypass	Milton Ernest to BMS	10mm/14mm SMA
A6 Rushden Rd Sharnbrook	Park Lane to Milton Ernest Rbt	14mm Hitex
A6 Kempston	Elstow Rd junction to A421 junction	10mm/14mm SMA
Eastcotts Rd Bedford	Cardington Rd to Cambridge Rd	10mm SMA

Residual salt can be considered in the decision-making process, This may result in the spread rate being reduced to less than that suggested in table above, or in no treatment being undertaken. The following is to form part of the decision process and considered when allowing for residual salt levels.

- Previous treatments
- Recent weather conditions
- Current weather forecast information
- Road Weather Information Station salt level readings
- Visual checks on the network

5.3. Treatments for Snow and Ice

Preparation before ice and snow

Before snowfall and where practicable, consideration will be given to spreading salt on as much of the network as possible.

When snow is forecast the rate of spread should be increased to **40gms per square** metre, which should help melt the initial snowfall and provide a wet surface from which to commence any ploughing.

Precautionary Treatments before snow or freezing rain

Weather conditions	Light or medium traffic (Category 3)
Light snow forecast	Spread: 20-40g/m²
Moderate/Heavy snow forecast	Spread: 40 or 2x20g/m²
Freezing rain forecast	Spread: 40 or 2x20g/m²

NOTE:

The lower rates (e.g. 20g/m2 for dry salt) can be used if the snow is likely to settle quickly, e.g. when the road surface temperature is below zero, the road surface is not wet and the snow is not wet, and/or there is little traffic after snowfall begins and settles.

5.4. Treatments during snowfall

Ploughing should start and, where practicable, be continuous to prevent a build-up of snow.

When ploughing is carried out, snow ploughs will be set at a height to avoid risk of damage to the plough, the road surface, street furniture and level crossings.

Ploughing shall continue until all traffic lanes are clear. Clearance of snow should be concentrated on a hierarchical basis, that is A and B class roads, then C class roads, and finally the UC class roads in the Priority 1 network (See Section 8).

<table>
<tr><th colspan="3">Treatments During Snowfall</th></tr>
<tr><td colspan="3">Plough to remove as much material as possible (e.g. slush, snow, compacted snow)
(ploughing should be as near as possible to the level of the road surface)</td></tr>
<tr><td>No ice or compacted snow on surface</td><td colspan="2">Ice or compacted snow on surface (see Note 2)</td></tr>
<tr><td rowspan="2">Spread 20-40g/m²

(See Note 1)</td><td colspan="2">Is traffic likely to compact subsequent snowfall before further ploughing is possible?</td></tr>
<tr><td>YES</td><td>NO</td></tr>
</table>

	To provide a de-bonding layer, spread: 20-40g/m² (See Note 1)	No de-icer should be spread

NOTE:

1. During and after snowfall, only the ploughed lane should be treated if other lanes have still to be ploughed. The spread width settings should be adjusted accordingly.
2. A de-icer should not be spread alone without abrasives to anything other than a thin layer of ice or compacted snow when snowfall has ceased or future snowfall will be less than 10mm. Applying salt alone to compacted snow and ice can produce dangerously slippery conditions if a weak brine film is formed on top of the ice/snow layer

5.5. Treatment when slush is on the road (and it may refreeze)

Remove as much slush as possible by ploughing to reduce the amount of material available to form ice when temperatures drop, as well as to reduce the amount of salt required for subsequent treatments.

Treatment For Slush When Freezing Conditions Are Forecast
Plough to remove as much slush as possible (ploughing should be as near as possible to the level of the road surface).
After removing slush, spread: 40g/m² (See Note 1)

NOTE:

1. After snowfall, and when there will be no further ploughing but some slush remains on the road surface, it may be necessary to change the settings normally used for precautionary treatment to ensure a satisfactory distribution is achieved over the target spread width.

5.6. Treatment when thin layers of ice (up to 1mm) have formed

Treatment For Thin Layers Of Ice (Less Than 1mm Thick)	
Forecast weather and road surface conditions	**Medium/Light Traffic**
Lower of air or road surface temperature higher than *-5˚C*	Spread: 40g/m² of dry salt, or 40g/m2 of salt/abrasive mix (see Notes 1 and 2)
Lower of air or road surface temperature less than *-5˚C*	Spread: 40g/m2 of salt/abrasive mix (50:50) (see Notes 1 and 2)

NOTE:

1. Abrasives should ideally be 5-6mm and angular, but gradings down to 1-5mm should be reasonably effective. After abrasives have been used, drainage systems should be checked and cleared if necessary. Recovered material, which will be contaminated with road oil, must be disposed of safely.

2. Care is needed when salt is mixed with abrasives with a high moisture content. Checks should be made that the mixture remains free flowing, does not clump and can be spread effectively

5.7. Treatment for thicker layers of ice or compacted snow

When thicker layers of ice have formed, including after freezing rain, the recommended treatment is as detailed in the table below.

Treatment For Layers Of Compacted Snow And Ice	
Plough to remove as much material (e.g. slush, snow, compacted snow) as possible from the top of the compacted layer	
Medium Layer Thickness (1 to 5 mm)	**High Layer Thickness (greater than 5mm)**
For initial treatment, spread: 40g/m2 of salt/abrasive mix (50:50) (see Notes 1, 3, 4 and 5) For successive treatments, spread: 20g/m2 of salt/abrasive mix (50:50) (see Notes 1, 3, 4 and 5)	For initial treatment, spread: 40g/m2 of abrasives only (see Notes 2, 3, 5 and 6) For successive treatments, spread: 20g/m2 of abrasives only (see Notes 2, 3, 5 and 6) After traffic has started breaking up the layer, spread: 20g/m2 of salt/abrasive mix (50:50) so salt can penetrate the layer and reach the road surface (see Notes 1, 3, 4 and 5)

NOTE:

1. For medium thicknesses of compacted snow and ice, treatments without abrasives should only be used when earlier precautionary treatments have successfully established a de-bonding layer, and there is sufficient traffic to break up the layer of ice quickly.
2. For high thickness of compacted snow and ice (greater than 5mm), treatments with a significant amount of salt should not be considered because they may leave the surface uneven. Any brine formed on the surface may collect in hollows and deepen them further, which can lead to a very uneven surface.
3. Abrasives should ideally be 5-6mm and angular, but gradings down to 1-5mm should be reasonably effective. After abrasives have been used, drainage systems should be checked and cleared if necessary. Recovered material, which will be contaminated with road oil, must be disposed of safely.
4. Care is needed when salt is mixed with abrasives with a high moisture content. Checks should be made that the mixture remains free flowing, does not clump and can be spread effectively.
5. When there are layers of snow, compacted snow, or ice of medium or high thickness on the road surface, it may be necessary to change the settings normally used for precautionary treatment to ensure a satisfactory distribution is achieved over the target spread width

5.8. Continuous working for the clearance of persistent Ice and Snow

During times of persistent ice and or snow, it may be necessary to carry out a continuous salting and ploughing regime. As this type of operation will increase

costs to the authority, the instruction to commence all day continuous working will be agreed between the duty manager and a senior officer at Bedford Borough Council.

5.9. Procedure to be undertaken when it becomes impossible to keep the Priority 0 network open to traffic

During times of extreme ice or heavy and drifting snow it may become impossible within the resources available to keep even the Priority 0 network open to traffic.

If this becomes the case then the respective highway authorities should consider implementing Gold Command within the Bedford and Luton Local Resilience Forum framework.

6. Performance Monitoring and Record Keeping

6.1. General

It is important that the cost effectiveness of the winter maintenance operation is regularly assessed. However, it is considered important that this Winter Maintenance Policy and Operational Plan is reviewed annually by Bedford Borough, prior to the new winter season, in the light of the experiences gained during the previous winter season.

6.2. Provider Operations

Service delivery is monitored by the Bedford Borough Council Highways Team

6.3. Salting /Snow Clearing Decision Making

At the time of the duty manager making a decision as to whether or not to salt and or clear snow, a record form shall be completed in every case as per the forms detailed at Appendices C and D.

6.4. Operational Activities

During each salting or snow clearing action, the supervisors at the depot will record the information on the form as detailed at Appendix J. The supervisors will forward the forms to the duty manager each week.

6.5. End of Winter Maintenance Period

Bedford Borough Council Highways Team will provide summary reports of decisions made and salting / snow clearance runs undertaken during the winter maintenance period.

6.6. GPS Records

All vehicles are equipped with Exactrak GPS Tracking and records of salting / snow clearing actions will be retained in a secure system.

6.7. Forecasting Service

Bedford Borough Council Highways Team and duty managers will operate the DTN (Meteo Group) system for 2025/26. Monitoring of information is to be carried out using a form as detailed in Appendix C.
The Forecasting Services received from DTN (Meteo Group) are as follows:

- 36hr forecasts presented by 05:00, 11:00 and 17:00.
- 2-10 day text forecasts issued by 11:00 hrs.
- Graphical representation of probabilistic forecasts for 15 and 30 days.
- Site specific forecasts and graphs for 7 sites.
- 24 hr consultancy during winter season with proactive advice.
- Forecast monitoring and notification in the event the weather conditions significantly vary from those forecasts.
- End of season report.
- Actions Message board and emailing facility.
- Access to DTN (Meteo Group) Roadmaster Website

6.8. Record Keeping

All records and monitoring reports are to be kept for 21 years.

7. Route Hierarchy

7.1. Introduction

The salting routes were optimised in June 2016 to ensure effective operations.

A review in 2011 was undertaken on redefining the “Priority 0” routes that comes into operation if required by Government to reduce salt usage. The main changes being implemented under this review are to include important link roads to upper and middle schools, ambulance / fire station etc.

7.2. Agency Agreements

National Highways is responsible for the Motorway and Trunk Road network across both Council areas. BBC therefore has no winter maintenance responsibility for the A1 or the A421.

7.3. Priority 0 Network

The Priority 0 network is defined as:-

The resilient road network consisting mainly of A and B class carriageways, plus certain other roads serving upper and middle schools, and the premises of the emergency services that are not on or very close to A and B roads.

This is a network that is treated in the rare event that resources are not available for treating the highway authorities Priority 1 salting networks and the governments Salt Cell is convened. Examples of such rare events include health pandemics meaning drivers are not available, national fuel shortages, national salt shortages etc.

The Priority 0 network is detailed at Appendix K

7.4. Priority 1 Network

The Priority 1 network is the network of roads that is routinely treated for ice and snow. Priority will be given to maintaining the Priority 1 salting network clear of ice and snow.

The Priority 1 network is defined as all A and B class (category 2 and 3a) roads, most C class (category 3b) roads and some UC class (category 4 and 4a) roads. It includes busy peak hour commuter routes, main peak hour bus routes, routes to fire stations, ambulance stations, hospitals, and most but not all school bus routes and roads past all middle and upper schools. The complete Priority 1 network has been devised so that most villages of 500 plus residents are close to a treated road.

Subject to weather forecast and prevailing conditions the Priority 1 salting network will be treated prior to the formation of ice or fall of snow. The length of this network enables it to be treated within 2.5 hours of gritters leaving a depot.

The Priority 1 network is detailed at **Appendix K** and shown on the plans below. Plans can also be viewed online at https://www.bedford.gov.uk/parking-roads-and-travel/gritting-your-roads/

7.5. Priority 2 Network

Identifies the road network that, although not treated as a regular priority, is considered important enough to warrant treatment during prolonged winter weather when the Priority 1 network is passable by traffic, free from major ice and snow, and resources are available to add this Priority 2 network to the Priority 1 salting and or ploughing regime.

No precautionary salting shall be carried out on this network. This network of roads shall be considered for salting and snow clearing only in periods of prolonged adverse weather and then only when resources are not required on the Priority 1 network.

The Priority 2 network is shown in **Appendix K**.
Plans can also be viewed online at https://www.bedford.gov.uk/parking-roads-and-travel/gritting-your-roads/ **.**

7.6. Priority 3 Network

This remaining network not forming part of the Priority 1 or 2 networks consists of minor rural roads which carry relatively little traffic, together with urban estate roads, and will receive no de-icing or snow clearing treatment.

7.7. Footways & Cycleways

Busy footways in the vicinity of town centre shopping areas will be treated during times of sustained snow and ice, provided that in doing so does not divert resources from treating the carriageways on the Priority 1 and Priority 2 networks.

Where an on-street cycleway is part of a Priority 1 or Priority 2 route, then it will be salted as part of that route.

During times of prolonged and continuous ice or snow, then BBC Highways Inspectors will assess footway conditions daily and may arrange for localised hand salting. Such intervention will be focused on high flow pedestrian routes and areas with excessive gradients within the town centre area. The network of treated footways is shown on the plan below and in Appendix K. Treatment of these routes is undertaken by BBC Highways.

The town centre footway network is shown in **Appendix K**
Plans can also be viewed online at https://www.bedford.gov.uk/parking-roads-and-travel/gritting-your-roads/ .

7.8. Reciprocal Arrangements

In the interests of gritter route efficiency, adjoining highway authorities treat certain lengths of the Priority 1 network, and vice versa in that Bedford Borough Council treats certain lengths of roads in these adjoining authorities. These arrangements do not apply during snow events when ploughing is in place.

Reciprocal agreements are confirmed with the respective adjoining highway authorities prior to the winter season each year. If these agreements are temporarily suspended then Bedford Borough Council will confirm termination and

recommencement dates with the respective adjoining authorities. Records of annual agreements with adjoining authorities are kept and archived.

Current reciprocal agreements are detailed at Appendix L.

7.9. Road Closures

During the winter maintenance period, road closures on the Priority 1 network may cause traffic to be diverted on to roads on the Priority 2 or 3 network that are not normally salted. In these cases, the diversionary route will be treated as part of the Priority 1 network and will be salted for the duration of the closure.

There may be occasions when one of National Highways trunk roads may be closed, either planned or as an emergency. In such cases heavy levels of traffic will be diverted on to local roads. National Highways have stated that they will not salt a non-trunk road even if it is taking trunk road traffic, and therefore the diversion route will be added to the Priority 1 network if it is not already included.

For off peak road closures on the Priority 1 network, the timing of the closures shall be considered together with the predicted weather conditions in deciding whether to treat the diversionary route.

For emergency short term road closures on the Priority 1 network, these roads should be treated at the earliest opportunity or as the closure is lifted.

8. Weather Forecasts and Ice Detection Systems

8.1. Weather Forecast

Details of the current weather forecasting consultancy are given at Appendix M.

8.2. Icelert Detection System

BBC subscribes to the Findlay Irvine Icelert Bureau and DTN (Meteo Group) Roadmaster website systems which records road weather information and provides a medium for the forecasting consultancy to interrogate and to input data. The complete system assists the duty managers in arriving at more accurate and efficient decisions together with providing a historical weather record.

The daily weather forecasts are accessed via the Icelert Bureau & DTN (Meteo Group). The forecast provider also provides direct forecasts via email and text and a consultancy service where duty managers can discuss forecasts to help them come to a decision. This is important when forecasts are marginal.

Across Bedford Borough, there are three automatic road weather monitoring stations, and one operated by National highways. These are equipped with sensors to monitor air and road surface temperature, rainfall, humidity, road surface conditions and residual salt.

The forecaster collects information from the sensors as often as is necessary and this direct access enables more accurate forecasting particularly as to the timing of the onset of freezing conditions.

The information from the sensors is also available to the duty managers and enables actual temperatures to be monitored and plotted against the prediction graphs.

In case of Icelert Bureau and Forecast service failure, duty managers will seek information via telephone from the forecast provider.

The Icelert Bureau, and DTN (Meteo Group) archives predicted and actual temperatures together with the salt status of the carriageway. This information will be kept for up to 21 years.

Information on the Icelert Bureau, DTN (Meteo Group) forecast services and road weather monitoring stations are detailed at Appendix N.

8.3. Domain study and review of Outstation locations

In June 2016 Bedford Borough Council commissioned the Met Office to review and recommend improvements to their weather sensor network and suggest a series of climate domains to be used in the delivery of the winter service.

This work was carried out as part of an operational review following the end of the Amey contract and was intended to analyse the existing weather sensor network, establish appropriate climate domains and review the current distribution of sensors to create a robust observation network and make operational efficiencies within the winter road treatment service. The existing sensor network and domains were reviewed in conjunction with gridded climate, terrain, traffic and population data. These datasets were then be analysed alongside minimum daily ground temperature extracted from 5 road weather outstations to generate an optimal sensor network and domain divisions.

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A series of meteorological variables relevant to road surface temperature were selected and analysed to identify underlying relationships within the data. These relationships were then used to suggest areas of similar climatic characteristics known as climate domains.

The study concluded that three new climate domains could be established – these were generated using both site specific ground temperature observations and a number of long-term average meteorological variables which can be used to emulate road surface temperature. These were supplemented with additional data describing the underlying terrain, population distribution and traffic flow within the area. The key variables identified were minimum air temperature and terrain, however other important variables such as air frost, ground frost, snow lying and sleet / snow falling has also been considered.

The suggested domains were then used to review route coverage. It was determined that there were no operational savings to be obtained by amending routes so and due to the size of the Borough the differences between domains were marginal. The winter service will therefore operate on a single domain covering the whole of the Borough – i.e. there will be no instances where only part of the P0 or P1 network is treated, any decision to treat the network will apply to all routes covered by the service as stated elsewhere in this document.

To provide effective delivery of a winter maintenance plan a representative, structured network of weather sensors is required to ensure an appropriate treatment is actioned. The Met Office study advised that:

- The sensor at Sharnbrook could be relocated to higher terrain to the west.
- The sensor at Keysoe is retained.
- The sensor at Biddenham is relocated east of the Bedford conurbation
- A subsidiary sensor located in the Wilstead area

These changes aim to create a more robust and representative sensor network from which winter treatment decisions can be made.

In 2017/18 the sensor at Sharnbrook was upgraded to the latest specification and a new fully equipped senor was installed near Park Road in Roxton.

The Keysoe station on the B660 Pertenhall Road will be installed in future years when funding allows. Data will also be received from outstations in neighbouring authority areas.

8.4 Icelert Outstation Calibration

All Icelert outstation sensors are calibrated annually prior to the winter season. The frequency of and the responses to equipment downtime should be monitored.

9. Communications

9.1. Operational Communications

The need for strong links between the Winter Maintenance Duty managers and Council departments is a key requirement to enable effective liaison and coordinated decision making.

In the high-risk part of the winter maintenance season, Council staff responsible for coordinating school transport provision, will be directly informed by the winter maintenance duty manager of weather conditions and planned service provision.

Relevant contact details of key staff are shown in Appendix E. A roster for the duty manager will be circulated as part of the Councils Highways Incident Management Plan prior to the start of winter maintenance service.

9.2. Websites

Bedford Borough Council Website at https://www.bedford.gov.uk/parking-roads-and-travel/gritting-your-roads/

The Highways duty manager is responsible for providing daily updates of salting activities on the Bedford Borough Council website.

http://apps.bedford.gov.uk/winterupdates/

Bedford Transport Operations staff provide updates on service provision for the Councils social services and schools transport.

The website also includes a copy of this policy document, details of routes that are treated and advice on safer driving.

Other disruptions to Council Services will be included on the website where this information is available.

Twitter
https://twitter.com/grittertweets

Bedford Borough Council provides live updates on salting through the use of the social networking site Twitter. Updates are sent directly to subscribers when daily decisions on treatment are made. The Bedford Borough Council Highways duty manager is responsible for providing updates.

Publicity
It is important that the highway user is aware of and understands Bedford Borough Council's approach to winter maintenance, plus advice on how to prepare for and undertake a vehicular journey. Likewise for pedestrians, how to prepare to walk on footpaths that may be icy, even to refrain from walking wherever possible in severe winter weather

Highways users should refer to the Borough Councils website for information.

9.4. Media Communications

In the event of heavy ice and or snowfalls resulting in a risk of blocked roads, a one-point contact should be made between the Bedford Borough Council press office and local radio stations so that traffic information can be passed direct to the travelling public.

Information contained on the website will be supplemented by Bedford Borough press releases as necessary.

10. Salt Stocks

10.1. Salt

Salt is the prime material used for dealing with ice and snow. It is recognised that salt is also environmentally damaging, however other materials that can be used are either more detrimental to the environment or are prohibitively expensive. To gain the most economic and environmentally satisfactory solution, it is necessary that the minimum amount of salt is used to obtain the best effect.

Salt is stored at Brunel Road Depot.

At the start of the winter period the stock levels are maintained to their requirements for delivering the service.

Salt stock levels at start of season are to be 900 tonnes.

Salt usage throughout the period is reported by the duty manager using the decision sheet in Appendix D.

11. Salt Bins

11.1. Policy for the Provision of Salt Bins by the highway authority

A highway authority does not have a legal responsibility to provide salt bins on the highway network. Salt bins are provided for residents to self-help in salting the roads and footways in their areas. For the bin to be utilised, it must be provided close to residents who are prepared (but not obliged) to spread the salt.

Salt bins are and can be provided for known trouble spots such as sharp bends, steep hills, etc., and are predominantly used during times of snow fall but little used during the rest of the winter period.

Ensuring known trouble spots on the Priority 1 salting network and elsewhere have a salt bin assists in reducing incidents and accidents with a consequent saving to the environment through less use of materials to affect repairs.

Each bin is to be checked annually and refilled before the start of the winter season. Bins that are either broken or worn are to be replaced as necessary. A stock level of around 15 bins will be maintained.

11.2. Highway authority salt bin inventory

Locations of salt bins are shown in Appendix P.

11.3. Assessment Criteria for highway authority provision

The sites to be assessed are those where salt bins are requested. Points are awarded according to the level of risk as set out below.

Steep Gradients

The level of gradient shall be assessed. This shall not be subjective and evidence of the gradients physical measurement shall be attached to the risk assessment. The gradient to be measured shall be greater than 50 metres in length.

The points are awarded as follows:

< 5% (1:20)	0 points
5% - 10% (1:20 - 1:10)	5 Points
>10%	10 Points

Bends (<u>not subject to a 30mph or lower speed limit</u>)

The bend's radius shall be assessed by the Highways Team. This shall not be subjective and evidence of the bends physical measurement shall be attached to the risk assessment.

The points are awarded as follows:

Radius < 100m	5 points
Radius < 50m	10 points

Usage (Schools, sheltered accommodation, emergency services etc.)

Roads where there are high volumes of vulnerable users or roads on which emergency services are based.

The points are awarded as follows:

Schools, sheltered accommodation, transport interchanges	5 points
Access to emergency service base / stations, hospitals etc.	5 points

Nearby residents

It is important that a Council provided salt bin will be used by nearby residents. If there are no adjacent / nearby residents, then a salt bin will not normally be provided as the bin is unlikely to be used.

The points are awarded as follows:

Nearby residents	5 points
No nearby residents	0 points

Cut off point

Locations with a total of 15 points or greater will be considered for the provision of a salt bin.

11.4. Purchase and maintenance of salt bins by Town and Parish Councils or by Ward Members.

A number of Councillors and Parish Councils within Bedford Borough have requested salt bins and indicated that they were willing to contribute to the cost of supply and the annual maintenance of the salt bins. To give Town & Parish Councils the opportunity to provide and maintain additional salt bins in areas where the Council would not consider salt bins to be necessary on highway grounds, the assessment criteria as in 11.3 outlines the basis on which this should be considered.

The Town & Parish Councils would be responsible for the filling of their salt bins. The Council through its Highways team could assist in providing the salt if required, subject to availability.

If at a future date, the Town or Parish Councils determined not to continue with the salt bin or if a Town or Parish Council does not use or maintain their salt bin, the Borough Council will arrange for its removal from the public highway.

A review is carried out annually by Bedford Borough Council as to whether or not the existing bins are fit for purpose. If it is determined that a bin is no longer required (i.e. it no longer meets the criteria or is placed on a salted route), then those of serviceable quality will be offered for use by Town & Parish Councils at no cost on a collection only basis.

Requests from Members for salt bins to be installed will be assessed on the same criteria as used for Town and Parish Councils. If suitable against the criteria, Members would be financially responsible for the purchase, installation and subsequent filling of the salt bins using their ward funds (although this would be facilitated by officers). The Council through its Highways team will provide the salt, subject to availability.

If the ward fund ceases, then the Borough Council will carry out a risk based assessment on the need for the bin. If the bin does not meet the criteria, then it will be removed and taken in to store.

12. Advice on snow clearance

12.1. The Snow Code

The Department for Transport has published a snow code offering advice for residents and businesses on clearing pavements. Full details of the snow code can be viewed on the DirectGov website at

https://www.gov.uk/clear-snow-road-path-cycleway
Extracts from this Code are produced below:

Clear snow from a road, path or cycleway

You can clear snow and ice from pavements yourself. It's unlikely that you'll be sued or held responsible if someone is injured on a path or pavement if you've cleared it carefully.

How to clear snow and ice

When you clear snow and ice:

- do it early in the day - it's easier to move fresh, loose snow
- don't use water - it might refreeze and turn to black ice
- use salt if possible - it will melt the ice or snow and stop it from refreezing overnight (but don't use the salt from salt bins as this is used to keep roads clear)
- you can use sand if you don't have enough salt - it will provide grip underfoot
- pay extra attention when clearing steps and steep pathways - using more salt may help

13. Snow Fences

13.1. General

Consideration should be given to the erection of snow fencing which can significantly reduce the drifting of snow onto the highway, although this has not been necessary for many years.

The legal powers to erect snow fences on or adjacent to the highway are contained in Section 102 of the Highways Act 1980. Where no agreement can be reached with the landowner, the Highways Act also provides compulsory powers in Sections 239, 240 and 250.

13.2. Design and Layout

Research has been carried out into the design and location of snow fences and reference is to be made to RRL Report LR362 "Snow Fences" by L E Hogbin (January 1970)

Areas that historically have needed attention during drifting are:-

- A428 Stevington Turn
- B660 Ravensden
- A6 Knotting

14. Responsibilities of Water Utilities for leaks onto the Highway

14.1. Introduction

The following procedure is for dealing with leaks from utilities apparatus onto the highway, such that during periods of sub-zero road surface temperatures (RSTs) ice is likely to form on the highway.

The utility is ultimately responsible for the failure of their apparatus and any consequence. This includes compensating the highway authority (and other utilities) under the New Roads and Street Works Act 1991 (NRSWA), section 82 or any other parties under common law. However, this does not exonerate the highway authority who are obliged to assist the utility when requested or on the failure of the utility to discharge its responsibilities.

14.2. Procedure

On discovery of leaks or bursts on the Highway

It is anticipated that members of the public would notify the majority of leaks directly to the relevant utility. Any leaks found by the highway authority or its agents whilst carrying out their duties shall be reported immediately to the relevant utility. Should this be during a period of sub-zero RSTs, or where sub-zero RST's are anticipated, the highway authority or its agents are obliged to take suitable action until the utility can assume control of the site.

Suitable actions may include but not limited to:

- Salting the localised area on a regular basis.
- Damming or filtering the seepage though a rock salt bung.
- Protecting and signing the affected area.
- Any actions to prevent water seeping on to the highway surface.

Dealing with the water seepage

On assuming control of the site the utility is expected to carry out all actions and procedures as would be required under NRSWA. This will include the salting of any seepage onto the highway. However in some situations because of the excessive length of the road affected the highway authority will be required to assist. This assistance may be:

- Advice or guidance in the deployment of traffic management as would be expected under NRSWA.
- The provision of rock salt.
- Manpower and plant in order to salt large areas of the highway.
- Providing weather forecast and advising on precautionary salting actions.

Signing and protecting

If RSTs are forecasted to be at or below zero, the utility shall deploy 'Ice Warning Signs' to 554.2 with sub-plate 554.3 and shall advise the duty manager. Any further measures which may include extra signing or measures to warn highway users of the presence of ice shall only be deployed with the agreement of the duty manager. Lane or road closures may only be used in exceptional circumstances.

Recharging for works or assistance

The highway authority may recharge the utility for:

- Plant, labour and material supplied upon the utility's request.
- Action(s) carried out between notifying the utility and them assuming control of the site.
- Damage caused to the highway under section 82.
- Any subsequent claims against the highway authority as a result of the leakage.

15. Vehicles and Plant

15.1. Introduction

The size, composition and standard of the vehicle fleet have a major impact on the economy, efficiency and effectiveness of the Winter Maintenance operation and vehicle unreliability can seriously undermine the integrity of the Winter Service Operational Plan.

15.2. Winter Maintenance Fleet

The BBC winter maintenance fleet is made up of directly owned vehicles. A current list of the vehicles is as shown at Appendix Q.

All vehicles that are used for spreading salt utilise Exactrak GPS route information and vehicle tracking software so that documentary evidence of what a vehicle is doing at any one time can be accessed. Data recorded during a salting action are; speed, whether salting or not, direction of travel and GPS location, all at 5 minute intervals. This facility also provides for access via the councils' website if needed, as to display of live tracking for customers to view.

All salt spreading vehicles are speed related and calibrated accurately. Additional checks on the rate and width of spread are carried out at monthly intervals throughout the winter period.

Most vehicles are single manned during normal precautionary salting and post salting for ice, although some routes require double manning (ie where the route consists of narrow roads or particular vehicle movements that require the presence of a banksman)

To ensure that sufficient drivers are available to cover for 24 hour manning in times of severe weather, two drivers are provided for each route.

All operatives of salt spreading equipment will be in possession of the 'Winter Maintenance Operators Qualification' awarded by City and Guilds Institute.

15.3. Supplementary Snow Clearance Plant

In the event of heavy snowfalls, the routine salting and snow clearing fleet may find it difficult to cope with the conditions. In this respect private contractors shall be employed to clear snow. The list of available contract plant is revised annually and is currently as detailed at Appendix R.

The following advice was issued by HMRC during the last severe winter and there is no reason to suspect that this advice would alter in the event of sustained snow. Private contractors should be advised to ring HMRC to confirm.

HM Revenue & Customs

HM Revenue & Customs (HMRC) confirmed today that during extreme weather farmers can use red diesel in their tractors to help grit and clear snow from public roads.

Under normal rules any vehicle that is being used to clear snow from public roads using a snow plough or similar device is entitled to use red diesel. However, only vehicles that are constructed or adapted and used solely for spreading material on roads to deal with frost, ice and snow can undertake gritting work while using red diesel.

HMRC recognises the vital role played by farmers in helping to keep rural roads clear. So during this period of extreme weather, HMRC will adopt a pragmatic approach to the rules. This means that agricultural tractors on public roads clearing snow or gritting to provide access to schools, hospitals, a remote dwelling, or communities cut off by ice and snow can continue to use red diesel.

More details can be obtained by calling the Excise and Customs Helpline on 0845 010 9000

16. Staff Rotas and Working time.

16.1 Summary of requirements for Drivers

Winter Maintenance Activity operates under GB Domestic Regulations. Staff included on the winter driver rota must be aware of the following regulations but operations must where required be mindful of and compliant to:

- Working Time Directive (opt out must be formally signed)
- GB Domestic Regulations
- Working Time Regulations
- Emergency exemptions

16.1.1 Working Time Directive:

- If Formal 'Opt Out' WTD 48- & 60-hour limits do not apply (see adequate rest)
- Average weekly working time must not exceed 48hrs (17-week average)
- Maximum working week must not exceed 60hrs
- Specifies breaks
- Night provision do not apply (states regular at least three hours)

16.1.2 GB Domestic Regulations:

- Daily Driving Limit 10hrs daily (includes On & Off-road driving)
- Daily Duty limit 11hrs Daily (not applicable non-driving day)
- Duty limit does not include Rest, Breaks and POA's
- Must take 'Adequate Rest'
- Must Records all working hours & Breaks on weekly record sheet/Tachograph
- WTD still applies where employee has not formally opted out

16.1.3 Adequate Rest:

- Regular rest periods – 'Sufficiently long and continuous as to avoid fatigue'.
- Plan Rest between normal day and evening shifts, planned works will show a 9-hour night rest period (Equates to EU Minimum).
- EU Breaks & Rest rules help guide our planning of 'Adequate Rest' over working week, including periods of daily rest and days off.
- Changes to planned Rotas will endeavour to give as much notice as possible.
- Response to Emergency Weather may affect rest/days off (Emergency Exemptions).
- Adequate Rest can be individual – Managers should reduce an individual's duties if concerned.

16.1.4 Working Time Regulations:

- These are the general worker's rights to rest breaks.

16.1.5 Emergency Exemptions:

- Winter Maintenance is not an Emergency – Normal limits apply
- Emergency Exemptions only apply to Exceptional events that cannot be foreseen.
- WM Shifts and normal duties planned to comply with GB domestic & 'Adequate Rest'.
- Response to specific Emergency weather event allows limits to be suspended for short periods.
- Suspension only as long as required to return to planned operational rotas.

16.1.6 Record keeping:

- Drivers are legally required to keep accurate records.
- Records must include all working time.
- Notify daily hours worked.
- Use Drivers record book (Recording all breaks on Record Sheet).
- Daily download Tacho card to device at end of shift (Refuse hatch).
- Supervisors/Managers to review and adjust Rotas as may be necessary.

16.1.7 Driver Responsibility:

The LGV driver is considered a professional in eyes of the law, as he/she has trained to acquire and retain their licence. The Driver always has a liability if they exceed their legal driving/duty limits and could face prosecution (as could Bedford Borough Council). Rotas and instructions issued by supervisors will endeavour to keep drivers inside limits but if the driver thinks they may exceed limits they must highlight this to their supervisor. Drivers included on the winter rota will be briefed on the relevant regulations prior to the winter season commencing.

16.2 Winter Maintenance, Annual Leave and Resetting the Clock for Drivers

Any member of staff taking an annual leave day or days may be removed from any on-call rota for that day/s. Annual leave will be considered when staff are on the winter rota, considering operational requirements.

Where an annual leave day is taken against a normal shift e.g. 07.30hrs to 16.00hrs, (including lunch break), 8 hours must be recorded on the weekly duty record for the purposes of calculating average working week figures, when a full week of leave is taken 37 hours must be recorded. These figures are legislated and have no regard to the actual working day or week adopted by an individual organisation. Time taken off for paternity, sick and parental leave must also be recorded.

Note: Only 4 weeks of leave in the annual period are legally required to be recorded for the purpose of calculating average working weeks. Any leave in addition to the 4 weeks may be shown as zero and helps reduce average working hours. The employee must be consulted and agree when these additional hours are utilised.

Drivers operating under GB Domestic Rule cannot exceed 11 hours Duty and 10 hours Driving within a 24-hour period. The Duty and Driving time must be calculated in relation to the 24hr period from the start of their period of work/driving. Additional periods of work/driving within the 24hr period are added to the initial day – even where they fall in the next calendar day. Any element of

work/driving falling after the end of the 24hr period forms work/drive time in the new 24hr period.

Where a driver starts work/driving at a later than normal time, the 24hr clock resets forward and cannot reset back until a rest day has elapsed. Where the normal shift is resumed the calculation to transfer hours into the correct 24-hour period must be completed on every day, until a rest day has elapsed.

Example:
An employee works a normal shift of 07.00hrs to 15.00hrs and takes a single day of leave but remains available for an evening call out rota, returning to work at 16.00hrs until departure at 21.30hrs.

The following day the employee returns to work to complete their normal 7-3 shift (following a period over 9 hours continuous rest).

8 hours annual leave must be recorded for average working week calculations and the 24-hour clock resets to 16.00hrs to record the 5.5 hours of duty. Any duty completed within the following 7-3 shift will fall within the 16.00hr start/finish 24-hour period.
Completion of a full 7.5hrs of duty will produce a non-compliant 24hr total of 13 hours duty.

To have remained compliant the individual should have ceased work at 12.30hrs on the second (calendar) day or 13.00hrs if a half hour break had been taken during that shift; alternatively, a later start time could have been used.

The adjustment of hours between calendar hours must continue to be made in line with the 24-hour clock until a rest day has elapsed.

Note: Late start duties carried out on a rest day will also reset the clock for subsequent days until a rest/non-working day has elapsed.

17. Review of Winter Maintenance Policy & Operational Plan: Summer 2026

17.1. General

This Policy and Operational Plan has been reviewed in advance of the start of the 2025/26 Winter Season.

Appendix A – Major Responsibilities of BBC

Responsibility

Update and revise W M Plan

Monitor requirements of W M Plan

Update and revise route hierarchy

Confirm adjoining County reciprocal agreements

Arrange weather forecasting consultancy

Extend or otherwise Winter maintenance season

Winter Maintenance Duty manager Rota and Training

Implement daily actions and responses

Compliance to Driver/Staff working regulations

Instigate and stand down 24 hour manning

Instigate consideration of a Civil Emergency

Icelert System maintenance

Maintenance of fleet

Allocation of fleet to route hierarchy

Spread rates of salt, widths of spread etc.

Revision of contract snow clearing plant list

Media communications in snow conditions

Arrange salt purchase and storage

Maintain salt bins

Arrange for erection of snow fences (if required)

Performance monitoring and record keeping

Appendix B – Notification of Decisions

A decision will be made before 12-00 by the Winter Decision Maker as to what action if any is to be taken. This decision shall immediately be passed on to the following, via the Icelert group address email system.

If it is felt that the forecast is too border line to make a firm decision before 12-00, then the decision can be delayed until the forecast update is received at approximately 17-00 hours.

A copy of the Appendix D decision record form will be emailed to Bedford Borough Council contacts listed above for each decision.

It is normal that winter duty vehicle drivers will have to be stood down and ‘Off duty’ from around 14.00 (depending upon the time of any treatment) to enable an evening run to be carried out.

Working a full day shift or late stand-down followed by a winter maintenance run within the 24hr period from their start of work would result in the full winter maintenance crew not complying with working regulations.

Appendix C – Composite Temperatures and Actions Record Sheet

Winter Maintenance Record

Run No.	Routes (P0/P1/P2)	Date	Duty Engineer	No. of Runs	No. Runs (Cum)	Salt rate G/M2	Met office Temperatures deg. C Pred. Min. Road	Pred. Min. Air	Actual Min. Road	Actual Min. Air	Proposed Start time	Actual time First veh. start	Actual time Last veh. finish	Time road temp fell to zero at sharnbrook	Snow?	Snow depth	Time of decision if reactive	Adequate residual salt? Y/N	Hand salting ped areas Y/N	PPI achieved Y/N?	Comments

Appendix D – Decision Record Sheet (Example)

Bedford BC Winter Maintenance Decision - Appendix D form

Winter maintenance decsion for (Date)		Time			
Duty Manager		Agreed By			
Summary of Meteo Group forecast					
				Wet	Ice
			Roxton		
Are any Stations showing wetor Ice?			Sharnbrook		
			Keysoe		
			A421 Marsh Leys		
Are road surface temperatures predicted to be around or below zero?					
Is a hoar frost predicted?		Details :			
	Routes	Time to Start Treatment		Spread rate g/sqm	
Proposed Action					
Is decision based upon residual salt levels? If yes then summarise details					
Is Salt Cell inoperation?	Details:				
Salt StockInformation	Current stock	Usage from this decsion		Residual	
London Road BBC	600		0		
Brunel Road	3000		0		
Salt on Order		expected delivery		TBC	
Extra information - Dates / times / notes of any discussions					

Time Telephone Call made to Operational supervisor

Time Icelert bulletin posted

Time Website Updated

Time Tweet Sent

Appendix E – Contact Details

Winter Maintenance Duty Managers

DUTY MANAGER	07384 835956

Winter Maintenance Works Supervisors

Simon Vaughan	07920 380726
Neil Cray	07920 072293
Jason Maskell	07879 821631
Tom Arnold (Team Leader Works Delivery)	07780 954286

Bedford Borough Council Officers

Paul Pace (Service Director – Public Realm, Highways and Waste Management)	07827 306402
Iain Booth (Manager for Highways)	07778 816101
Andrew Prigmore (Head of Highways, Fleet & Traffic Operations)	07785 587902

Bedford and Luton Local Resilience Forum

DUTY EMERGENCY PLANNING OFFICER	07468 472517

Appendix F – Residual Salt Check Form

Checks requested by:	
Checks carried out by:	
Date:	
Time:	

Location	**Residual salt visible on carriageway**
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No
	Yes / No

Once completed, this form should be emailed to the duty manager who requested the checks

This information will then be date stamped, archived and will be used to justify the winter maintenance decision for that day.

Appendix G – Requests for additions to Priority 1 Salting Network

WINTER MAINTENANCE - RISK ASSESSMENT DATA

1. Introduction

The aim of this document is to set out the model to assess the risk of a potential Personal Injury crash where frost or ice is a contributory factor. Such crashes could happen on any part of the network but the risk increases with the following environmental factors

- High Traffic Flows
- Steep gradients
- Low Radius Bends not subject to a speed limit.

Consideration is also given to roads where school and public bus services use these to transport large numbers of people.

Other factors such as poor drainage and driver behaviour are also factors but these are subjective and not part of the assessment.

2. Procedure

The Network Maintenance Policy Team will carry out the assessment. The sites to be assessed are those requested to be included in the precautionary network. Points are awarded according the level of risk as set out below.

3. Traffic Levels

The Transport Policy Section shall assess the level of traffic. The minimum requirement is a single day (weekday) 12-hour count and converted into Annual Average Daily Traffic (AADT). The report shall be attached to the riskassessment.

The points are awarded as follows:

< 750 AADT	0 points
751 - 1500 AADT	2 points
1501 - 2250 AADT	4 points
2251 - 3000AADT	8 points
> 3001AADT	10 points

4. Steep Gradients

The level of gradient shall be assessed by the Network Maintenance Policy Team. This shall not be subjective and evidence of the gradients physical measurement shall be attached to the risk assessment. The gradient to be measured shall be greater than 50 metres in length.

The points are awarded as follows:

< 5% (1:20)	0 points
5% - 10% (1:20 - 1:10)	2 Points
10% - 20% (1:10 - 1:5)	5 Points
>20% (1:5)	10 Points

5. Bends (<u>not subject to a 40mph or lower speed limit</u>)

The bend's radius shall be assessed by the Network Maintenance Policy Team. This shall not be subjective and evidence of the bends physical measurement shall be attached to the risk assessment.

The points are awarded as follows:

Radius < 100m	2 points

Radius < 50m 4 points

6. School and Public Bus Transport (Seating capacity larger than 7 persons)

Roads which form part of school and public bus transport will be assessed by the Network Maintenance Policy Team. This shall not be subjective and evidence of the bus routes shall be attached to the risk assessment.

NOTE: For school bus journeys, the number shall be counted only when the bus is travelling to a school and is carrying its normal complement of passengers. All public bus journeys will be considered.

The points are awarded as follows :

0 – 10 journeys / day	2 points
10 – 20 journeys / day	5 points
20 + journeys / day	8 points

Cut off point

Roads with a total equal or greater that 20 points will be considered for inclusion on the Precautionary Salted Network during the next review of the Winter Maintenance Plan.

Request From: _____

Address: _____

_____

Date: _____

Road requested: _____

Total Score: _____

Duty Manager: _____

Appendix H – Requests for salting off of Priority 1 Network

Request From: _____

Address: _____

_____

Date: _____

Time: _____

Route: _____

Location: _____

Decision: _____

_____

_____

_____

_____

Duty Manager: _____

Appendix J – Winter Service Supervisors Check List for vehicles and drivers

Date		**Time**		**Spread Rate**	**g/sqm**

Column reference				a	b	c	d	e	f	g	h	i	j	k	l	m	n
Route Number	Route Nickname	Lorry Reg No. OR Fleet Number	Max Load capacity	Salt Load m^3	Beacons & Lights checked (Y/N)	EXACTRAK working (Y/N) if not record	Drivers Name	Driver's declared hours from W.20 Record book (Hrs)	Break since stand down (Hrs)	Drivers signature to confirm route completed as per	Is total anticipated 24hr duty time under 11hrs (Y/N)	Time left depot (HH:mm)	Time returned depot (HH:mm)	Driver off duty (HH:mm)	Driver WM Duty Hours (HH:mm)	Actual total duty hours	Return to work
1	***Queens Park***																
2	***Putnoe***																
3	***Kempston***																
4	***Eastcotts***																
5	***Stagsden***																
6	***Gt. Barford***																
7	***Wilstead***																
8	***Thurleigh***																
9	***Sharnbrook***																
Spare																	
Footways																	

Notes (enter details of any breakdowns etc) and continue overleaf if necessary	**All routes completed satisfactorily. (Signed by Supervisor)** **Yes / No (If No comment overleaf)**

Bedford Borough Council Winter Maintenance Priority 0 Salting Routes inc Resilient Road Network



Please note that the gritter vehicles will continue their routes into our neighbouring authorities as part of the reciprocal routes

A1P
1:55,000

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KEY

Priority 0 Salting Route

Resilient Road Network

BEDFORD BOROUGH BOUNDARY

Please note that the gritter vehicles will continue
their roles into our neighbouring authorities as part of the reciprocal course

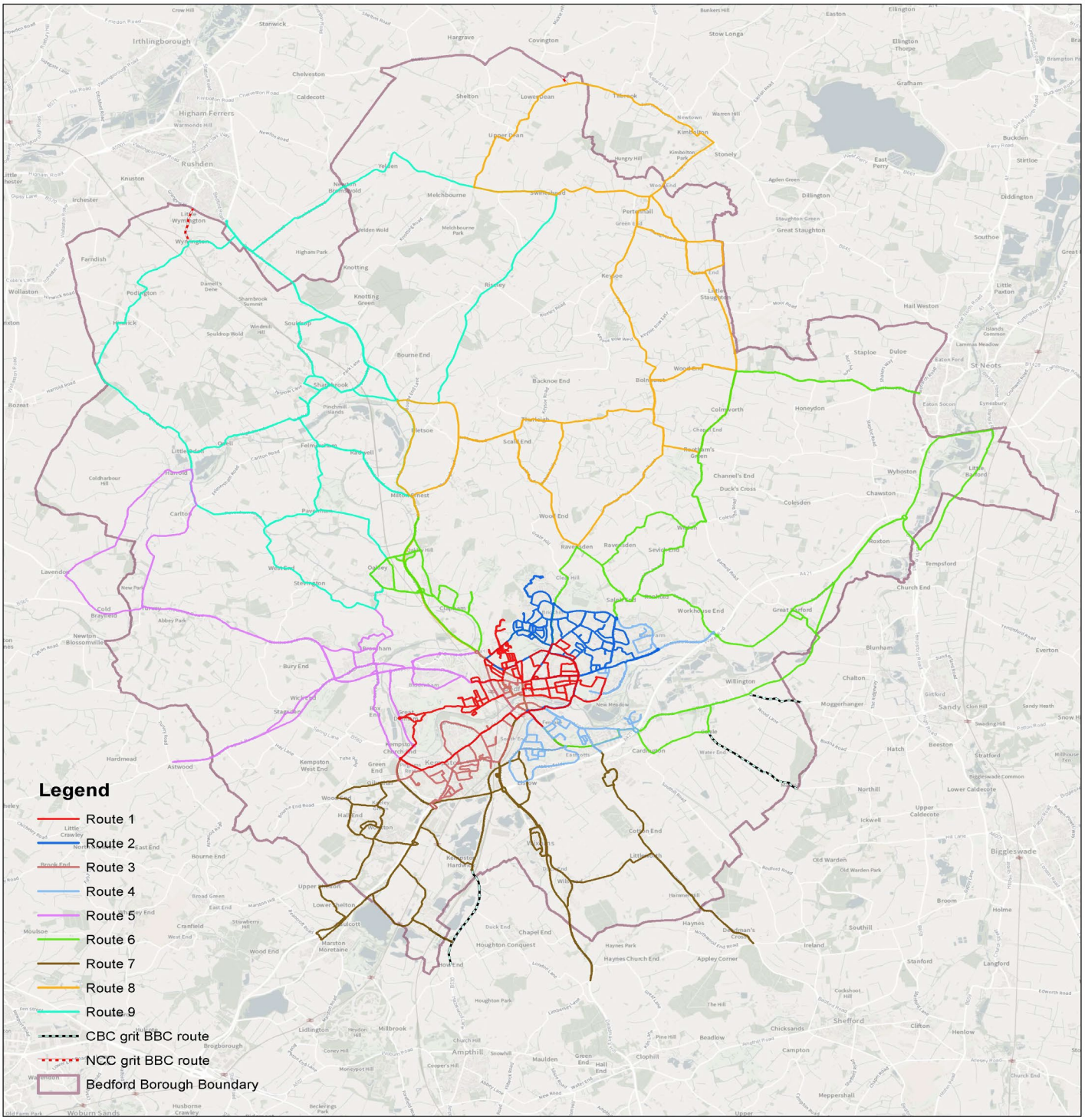
Please note that the gritter vehicles will continue their routes into
our neighbouring authorities as part of the reciprocal routes

A1P
1:55,000

BEDFORD BOROUGH COUNCIL

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Bedford Borough Council
Winter Maintenance
Priority 1 Salting Routes



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Date: 10/11/2021

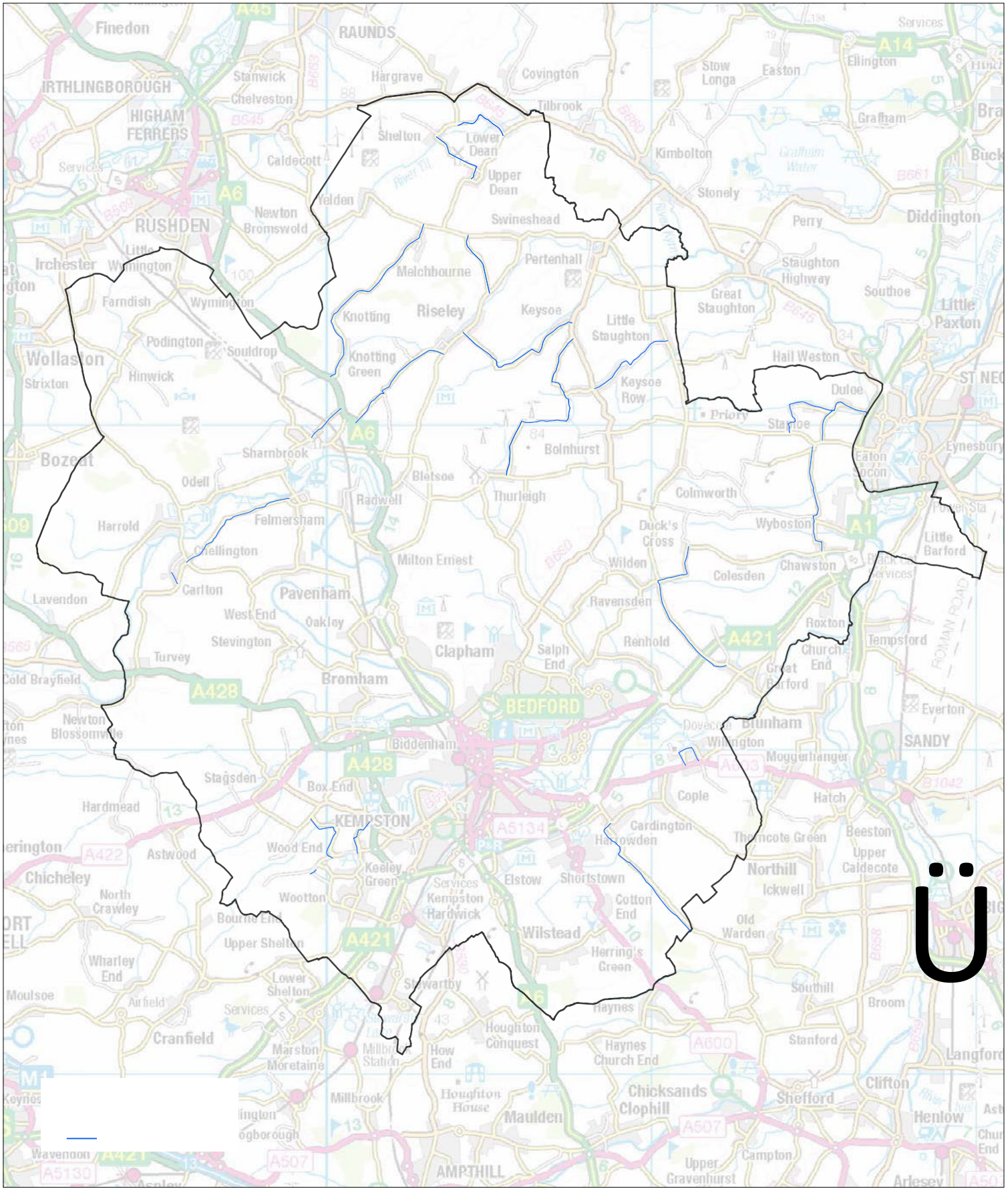
N

Produced on A1P@1:55,000

Please note that the gritter vehicles will continue their routes into our neighbouring authorities as part of the reciprocal routes

BEDFORD BOROUGH COUNCIL

Bedford Borough Council
Winter Maintenance
Priority 2 Salting Routes



KEY

Priority 2 Salting Route

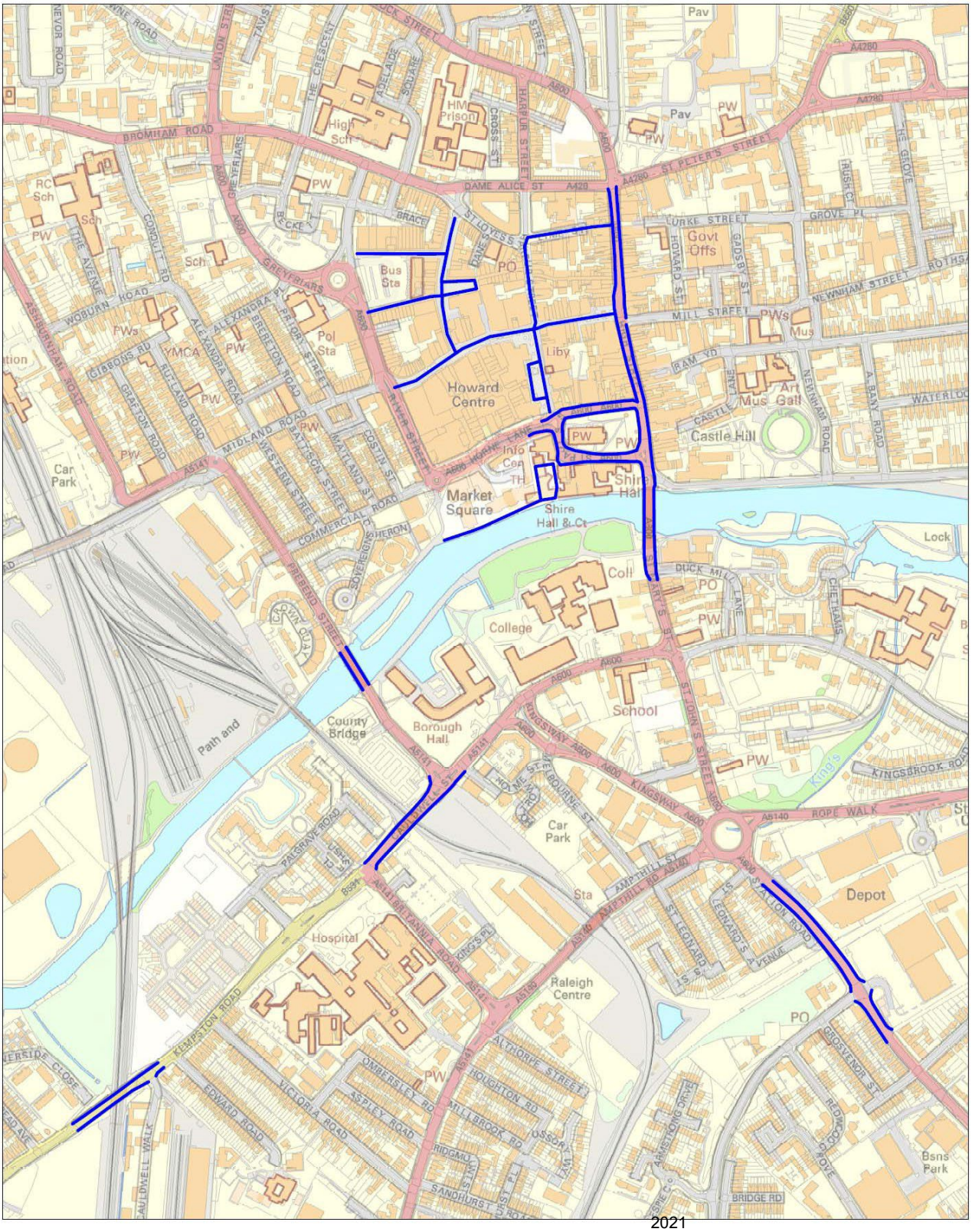
BEDFORD BOROUGH BOUNDARY

Please note that the gritter vehicles will continue
their roles into our neighbouring authorities as part of the reciprocal course

List pf priority 2 routes

Link Name
C22: Keysoe Road: Thurleigh
C22: Church Lane, Hatch Lane: Keysoe
C28: Felmersham Road: Carlton
C28 Carlton Road: Felmersham
C4: Knotting Road: Melchbourne/ Knotting Green: Knotting
C40: Colesden Road: Colmworth/ Wilden
C5: Barford Road: Wilden
C5: Green End Road: Great Barford
UC147: Southill Road: Cardington
UC17: Park Lane: Sharnbrook
UC19: Sharnbrook Road: Riseley
UC19: Riseley Road: Sharnbrook
UC2: Brook Lane: Dean
UC2: Shelton Road: Dean
UC21: Riseley Road: Keysoe
UC21: Keysoe Road: Riseley
UC23: West End: Little Staughton
UC23: Keysoe Row East: Keysoe
UC24: Duloe Lane: Duloe
UC24: Gypsy Lane, Staploe Lane: Staploe
UC25 Shakers Way: Staploe
UC27: High Street: Carlton
UC3: High Street: Lower Dean
UC36: The Lane: Wyboston
UC37: Roxton Road: Chawston
UC37:Staploe Road: Wyboston
UC55: Balls Lane, Church Road, Station Road: Willington
UC65: Tithe Road: Kempston
UC66: Green End Road: Kempston
UC66: Home Road: Kempston
UC67: Wood End Road: Kempston
UC7: Melchbourne Road: Riseley
C55: Station Road, Church Road, balls Lane: Willington
C48: Silver Street: Stevington
The Boundary: Bedford
Roundmead: Bedford
Meadway, Vicars Walk: Bedford
Byron Crescent,Spenser Road,Chaucer Road,Cowper Road: Bedford
Martell Road, Wilkinson Road: Kempston
Wyatt Road: Kempston
Farrer Street: Kempston
Haynes Road, Miller Road, Hope Road: Bedford
St Helena Road, Willow Road,Dents Road, Ivy Road: Bedford
Fenlake Road: Bedford
Thor Drive, Asgard Drive: Bedford
Waveney Avenue, Bournside: Bedford
Birkdale Road: Bedford

BEDFORD BOROUGH COUNCIL
Winter Maintenance
Footpath Salting Routes



2021

Footpaths salted including pedestrianised areas

BEDFORD BOROUGH COUNCIL

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N W E S

Bedford Town Centre Footpaths treated by hand salting

Route:

Midland Road junction with Greyfriars to junction with Allhallows – salting/spraying
Turn left up Allhallows to St Loyes, including Greenhill Street and Thurlow Street turn around and back to Midland Road – salting /spraying
Midland Road - Allhallows to Harpur Street – salting/spraying
Turn Left up Harpur Street to St Loyes/Lime Street – salting/spraying
Along Lime Street to end of carriageway, turn around and back to Harpur Street.- salting/spraying
Down Harpur Street to Silver Street – salting /spraying
Along Silver Street to the High Street turn around and back to Harpur Street
Down Harpur Street to St Pauls Square – salting/spraying
Around footway of St Pauls Square North and South including Piazza
Riverside Square paved areas and approach to pedestrian bridge (no salting on bridge)
Salt the High Street both sides between St Pauls Square and St Peters Street
Travel to Town Bridge /Embankment – no salt/spray
Salt footway over bridge to along St Marys to Cardington Road - salting/spraying
Travel to London Road/Rope walk – no salting/spraying
Salt footway over bridge to lights at Elstow Road. – salting/spraying
Travel back toward Rope Walk salting footway to junction of Station Road – salting/spraying
Travel down Kingsway to Melbourne Street, salt road up to Kiddi Caru.
Travel to junction of Cauldwell Street/Prebend Street and salt over bridge to Britannia Road
Travel to junction with Cauldwell Walk
Salt over bridge to opposite Whitbread Avenue – salting /spraying
Cross road and salt bridge in opposite direction to opposite Cauldwell Walk- salting/spraying
Travel to junction with Britannia Road – no salting/spraying
Salt over bridge to Prebend Street - salting/spraying
Along Prebend Street to junction with river side footway – salting /spraying
Cross over and salt footway to junction with Cauldwell Street – salting/spraying
Travel to junction of St Marys and Cauldwell Street and salt along St Marys and over the bridge from opposite Hotel to St Pauls Square – salting/spraying.

Summary of Locations covered

Town Centre streets

- Midland Road
- Allhallows
- Harpur Street
- Silver Street
- Lime Street
- High Street
- St Paul's square including the Piazza
- Riverside Square

Town Bridge footway, Embankment to Cardington Road lights including St Marys
London Road bridge footway between Rope Walk and Elstow Road
Holme Street between Melbourne Street to Kiddi Caru Nursery
Kempston Road, Bedford railway bridge footway between Prebend Street and Britannia Road
Bedford Road, Kempston railway bridge footway between Cauldwell Walk and Whitbread Avenue
Prebend Street Bridge footway between Cauldwell Street and riverside footway north of the river

Appendix L – Reciprocal arrangements with other Councils

Agreements exist with:

Central Bedfordshire Council
Cambridgeshire County Council
Milton Keynes Council
Northamptonshire County Council

Current reciprocal agreements

BEDFORD BOROUGH treats for NORTHAMPTONSHIRE
Avenue Road, Newton Bromswold from Borough Boundary to A6
A6 from Borough Boundary to Rushden Bypass
UC13 from Borough Boundary, Wymington Lane to A6

NORTHAMPTONSHIRE treats for BEDFORD BOROUGH
C12 from UC13 to Borough Boundary
B645 from UC1 to Borough Boundary

BEDFORD BOROUGH treats for CAMBRIDGESHIRE
B660 from Borough Boundary to the B645

CAMBRIDGESHIRE treats for BEDFORD BOROUGH
B645 from UC1 to Borough Boundary

BEDFORD BOROUGH treats for MILTON KEYNES COUNCIL
C26 (Bucks C.C. C10) from Borough Boundary to A428 Lavendon
A422 from Borough Boundary to Main Road (west)

MILTON KEYNES COUNCIL treats for BEDFORD BOROUGH
C28 (Bucks C.C. C14) from A428 Turvey to Borough Boundary
A428 from C28 Carlton Road to Borough Boundary

BEDFORD BOROUGH treats for CENTRAL BEDFORDSHIRE COUNCIL
C70 from Borough Boundary to Lower Shelton Road
A6 from Borough boundary to Haynes West End turn
A600 from Borough boundary to standalone warren
C54 from Borough Boundary to A1 slip road
C56 from Borough boundary near Willington to Great Barford
C79 Stewartby Way from Borough Boundary to Ampthill Road

CENTRAL BEDFORDSHIRE COUNCIL treats for BEDFORD BOROUGH
A603 from C56 in Willington to Borough boundary
C156 Cople from UC161 to Borough Boundary
B530 from roundabout near railway cottages to Borough boundary

Appendix M – Weather Forecasting Consultancy

Provided by DTN (Meteo Group)

DTN 14 New Street, London EC2M 4TR

Tel 020 3868 3300

Email: customerservices@dtn.com

DTN (Meteo Group) will be providing a forecasting consultancy service under the following terms and using the Icelert Bureau as a transmission medium:

Forecasting Services
- 36hr forecasts presented by -6:00-12:00 and 18:00 for 4 climatic domains
- 2–10-day text forecasts issued by 12:00 hrs
- Graphical representation of probabilistic forecasts for 15 and 30 days.
- Site specific forecasts and graphs for 7 sites
- 24 hr consultancy during winter season, with proactive advice.
- Forecast monitoring and notification in the event the weather conditions significantly vary from those forecasts.
- End of season report
- Actions Message board and emailing facility
- Access to DTN (Meteo Group) Roadmaster Website.

Appendix N – Icelert Ice Warning System

Locations of Mk8 outstations (OSGR)

OS Name	ID	latitude	longitude
Ridgmont	1	52.01647	-0.57572
Dunstable Downs	3	51.8514	-0.52702
Sharnbrook	2	52.23112	-0.52761
Arlesey	9	52.00956	-0.24295
Moggerhanger	10	52.12928	-0.33206
Deepdale, Potton	11	52.12533	-0.23836
Keysoe	8	52.26672	-0.41630
Milton Bryan	12	51.94597	-0.57936
Roxton		52.178360	-0.32023

Data collected at outstations

Surface condition
Road surface temperature
Road surface trend over last half hour
Air temperature
Dew point temperature
Relative humidity
Precipitation
Wind speed
Wind direction

Sharnbrook, Keysoe and Roxton will be the main BBC forecast stations.

Appendix P – Salt Bin Locations

Bedford Borough

Parish	Location
Bletsoe	Corner of The Avenue and A6
Bletsoe	Memorial Lane by top of green
Bolnhurst	Kimbolton Rd opposite Turnpike Cottage
Bromham	Lime Close
Carlton	School Lane near junction Turvey Rd
Carlton	School Lane past telephone exchange
Carlton	School Lane near Emmans Cottage
Carlton	1 The Causeway behind safety fence near Edens Lane
Carlton	2 The Causeway behind safety fence near Edens Lane
Chawston	Junction Colesden Rd and Roxton Rd
Chawston	1 On double bends by Homefield Road
Chawston	2 On double bends by Homefield Road
Colmworth	Queens Rd junction Church Rd
Cotton End	A600 on bend past Trow Close
Cotton End	Outside Village Hall
Duloe	Duloe Butts, by Anglian Water compound
Eastcotts	A600 Hammer Hill
Farndish	Irchester Rd outside Church
Felmersham	Marriott's Close junction with Grange Rd
Felmersham	Pavenham Rd by Dukes Lodge Barn
Felmersham	Pavenham Rd by bend
Felmersham	Margetts Close
Great Barford	Green End Rd, opposite junction with Birchfield Rd
Great Barford	Roxton Rd opposite New Rd junction
Hinwick	Wollaston Rd by Hinwick Hall
Hinwick	Village loop, near Park Farm
Honeydon	Honeydon Lane
Kempston West End	Opposite Firs House
Keysoe	Keysoe Row West at junction Church Rd by bus shelter
Keysoe	Keysoe Rd West opposite Freddies Cottage near B660
Keysoe	Keysoe Rd west by Virginia Cottage
Keysoe	Riseley Rd, by Rose Cottage
Keysoe	Riseley Road by Keysoe Park Wood
Keysoe	London End by double bends
Little Staughton	Green End, near speed restriction signs
Melchbourne	Knotting Rd junction Swineshead Rd
Melchbourne	Knotting Rd, opposite junction Park Rd
Knotting Green	Melchbourne Rd near telephone box
Knotting	Melchbourne Rd, junction Church Lane
Knotting	Melchbourne Rd, opposite Oakley Hunt Kennels
Odell	High Street, near junction Church Lane
Odell	High St opposite The Bell PH
Odell	Horsefair Lane at side of The Bell PH
Pavenham	Junction Mill Lane and High St
Pavenham	The Bury near junction with Church Lane
Podington	Gold Street
Podington	Wymington Rd, Podington by Glebe Farm
Radwell	Felmersham Rd junction Moor End Rd
Ravensden	Church End near Tudor House
Ravensden	Church End opposite The Cottage
Riseley	Gold Lane, near bridge

Riseley	Church Lane, opposite Lower School
Riseley	Bowers Close at top of hill
Riseley	High Street, opposite Brook House
Roxton	Park Road, opposite No 1
Sharnbrook	Park Lane, end of lay by opposite No 1 Park Lane
Sharnbrook	Corner of Loring Rd and Colmworth Rd
Sharnbrook	Junction Loring Rd and Glebe Rd
Sharnbrook	Pinchmill Close
Sharnbrook	Colmworth Rd opposite No 15
Sharnbrook	A6 Dual Carriageway Southbound
Shelton	UC1 Dean Rd, junction Lower Dean High St
Stevington	Silver St, end of Railway Walk
Souldrop	The Green
Swineshead	Riseley Rd, near junction High St
Thurleigh	Mill Lane
Thurleigh	Junction Milton Rd and Church Rd, by old shop
Thurleigh	By Village Hall
Turvey	Station Road adjacent Rose Cottage
Lower Dean	UC3 High St, near junction Upper Dean Rd
Upper Dean	C4 High Street, near Dean House
Upper Dean	Junction Shay Lane and Brook Lane
Wilden	Renhold Rd, near Newlands Farm
Wilden	Channels End Rd near Hillside Farm
Wilden	Colesden Rd near junction Channels End Rd
Wilden	Colesden Rd, near Colesden Lodge Farm bend
Wilden	Bottom of Shrubbery Lane
Wyboston	Junction The Lane and Roxton Rd
Wymington	UC13 High St, by Poplars Farm
Wymington	UC13 Wymington Lane by Goosey Lodge
Wymington	C12 Rushden Rd, near Church Lane by bus stop

BEDFORD

London Road Depot (within Parking)
Manton Lane junction Brickhill Drive (traffic Signals) (1)
Manton Lane junction Brickhill Drive (traffic Signals) (2)
Wedgewood Road junction with Gainsborough Rise
Haden Close junction with Gainsborough Rise by SNP
Ramsey Close by footway link to Brangwyn Gardens
Constable Hill/Turner Way junct with Gainsborough Rise
Kneller Close O/S no 3 by school
St Pauls Square - opposite Corn Exchange
Melbourne Street Car park
St Peters Street Car park
Curlew Crescent junction with Brickhill Drive
Swift Close O/S No 12
Plover Way junction with Curlew Crescent
Plover Way opposite No25 by Lamp Column 5
Hawk Drive junction with Curlew Crescent
Woodcote junction with Bowhill
Elstow Park and Ride

Elms Farm	Thor Drive roundabout junction with Asgard Drive
Elms Farm	Thor Drive junction Embla Close
Elms Farm	Thor Drive opposite No 19
Kempston	Hill Rise junction with Ridge Road
Kempston	Orchard Street O/S Springfield Lower School
Kempston	Kentmere Close junction with Thirlmere Road side 32
Kempston	Marshall Close O/S no 4

Appendix Q – Winter Maintenance Plant Inventory

To be confirmed following vehicle replacements

Appendix R – Winter Maintenance Contracted Plant

Area	Name / Address	Contact	Type of Vehicle
BBC	H Maskell and Son Duck End Farm Duck End Lane Wilstead MK45 3HP	01234740449 07785986554 (Darren Maskell) anytime info@hmaskell.co.uk Paul Green: 07710 107287 (Not Sundays).	Ford 132HP Tractor 4 wheel drive Fitted with Snow Plough Komastu 22 Ton Loading Shovel JCB Load-All with Bucket x 2 Wilstead & Harlington Based Volvo 22ton Excavator

Appendix S APSE data sheet
Highway and winter maintenance data

	Data input		Guidance manual reference
Number of planned routes subject to salting regime	**9**	**Routes**	**12.0**
Km of **total** highway network which are covered by salting regime	**485**	**Km**	**12.1**
Number of Km of network which are primary routes and covered by salting regime		**Km**	**12.2**
Number of gritters available	**11**	**Vehicles**	
Total aggregate annual mileage travelled by all gritting vehicles on all planned routes	**TBC**	**Miles**	**12.3**
Total aggregate treatment mileage travelled by all gritting vehicles on all planned routes	**TBC**	**Miles**	**12.4**
Target response time (in hours) for completion of planned pre-salting	**3**	**Hours**	**12.5**
Target response time (in hours) including allowed mustering time for non-planned salting (PRIORITY ROUTES)	**2**	**Hours**	**12.6**
Average actual response time (in hours) for completion of planned pre-salting		**Hours**	**12.7**
Average actual response time (in hours) including allowed mustering time for non-planned salting (PRIORITY ROUTES)		**Hours**	**12.8**
Actual number of planned pre-salting runs carried out during year	**46**	**Runs**	**12.9**
Actual number of days on which any non-planned winter maintenance function was carried out during year	**0**	**Days**	**12.10**
Km of footway subject to regular salting / gritting		**Km**	**12.11**
Percentage of footway subject to precautionary salting / gritting		**%**	

SUMMARY OF NETWORK COVERAGE	
TOTAL ROUTE KILOMETRES OF PRIORITY 1 NETWORK	**485**
TOTAL NETWORK KILOMETRES - BEDFORD BOROUGH	***848***
% COVERAGE OF PRIORITY 1 NETWORK TO TOTAL ROAD NETWORK	***57***
Needs to be updated TBC	

Appendix T

Winter Maintenance Driver briefing sheet

I understand that the following advice is designed as a basic guide only, and that if any further guidance is required it is my responsibility to seek advice from the BBC Fleet Transport Team at Brunel Road Depot.

I understand that it is mine and my supervisor's responsibility to: **ALWAYS make sure I understand driving regulations - BEFORE I drive or instruct an employee to do so.**

I understand that my inclusion on the winter maintenance rota means that I am liable to exceed the 48hr Rule and therefore by signing this compliance sheet I hereby formally 'Opt Out' of the working time directive requirements on rest periods.

I understand that my Tea/Lunch breaks should be taken well before the 6 hour limit and during normal daily work periods..

I understand that it is my responsibility to agree the provision of 'Adequate Rest' periods with my supervisor and that if rest periods are insufficient due to my inclusion on the winter maintenance drivers rota then this may result in the partial or full removal from the rota . I understand that the GB domestic driving hours rules are summarised as follows and it is my responsibility to ensure I comply with this guidance:

Domestic Hours	**Any driver exempt from EU rules is automatically subject to Domestic hours rules.**	
Daily Driving	Maximum 10 hours driving in 24 hour period	
Daily Duty	Maximum 11 hours duty time in 24 hour period – Duty means on duty for all periods of work whether driving or otherwise – **Excludes Rest, Breaks & Periods of Availability**.	
Breaks Min 15 mins	6 – 9 hrs shift	At least 30 minutes (Break must be taken no later than 6 hours)
	Over 9 hr shift	At least 45 minutes (Break must be taken no later than 6 hours)
A Day	Defined as any period of 24 hours from commencement of work	
A week	Defined as the period from Midnight on Sunday/Monday to the same time the following week.	
Adequate Rest	Drivers must have regular rest periods that are: ***'Sufficiently long and continuous as to avoid fatigue'.***	

I have received a copy of the winter maintenance driver's rota and understand that any request I make for annual leave during weeks I am on the rota will be considered taking into account operational requirements. If my leave is unavoidable I understand that by taking annual leave I may be removed from the rota for that day/s.

I understand that to ensure individual and corporate compliance with driving hours regulations, rotas and instructions issued by supervisors will endeavour to keep drivers inside limits, but if I, as a driver, think I may exceed limits I will highlight this to the Winter Maintenance and my own Supervisors.
In order to assist with works scheduling I agree that I will:

- Records my working time and notify the winter maintenance supervisor of daily hoursworked
- Use the Drivers record book- (Recording all breaks on Record Sheet)

I understand that decisions on winter gritting will normally be made around lunchtime or in the early evening (although this may vary due to weather conditions) and that I may be instructed to cease normal duties to enable me to undertake winter gritting duties.

Signed…….Print name……..Date……