

## Supplement 1 to the agenda

### Connected Communities Scrutiny Committee

Wednesday 12 March 2025, 10.00 am

Conference Room 1 - Herefordshire Council, Plough Lane Offices, Hereford, HR4 0LE

#### Contents

Item	Title and purpose	Page(s)
7.	<b>Highways Winter Maintenance</b>  To provide a review of winter maintenance of highways following the 2024/25 winter period, endorsing or otherwise the current arrangements and providing recommendations to the Cabinet Member for Roads and Regulatory Services ahead of the 2025/26 winter season.	3 - 38





# Title of report: Highways Winter Maintenance

**Meeting: Connected Communities Scrutiny Committee**

**Meeting date: Wednesday 12 March 2025**

**Report by: Head of Highways and Traffic**

## **Classification**

Open

## **Decision type**

This is not an executive decision

## **Wards affected**

(All Wards);

## **Purpose**

To provide a review of winter maintenance of highways following the 2024/25 winter period, endorsing or otherwise the current arrangements and providing recommendations to the Cabinet Member for Roads and Regulatory Services ahead of the 2025/26 winter season.

## **Recommendation(s)**

**That:**

- a) the efforts of the whole team in delivering the winter maintenance service be noted;**
- b) the importance of utilising professional weather services through highly experienced meteorologists, drawing on extensive dedicated industry and location specific forecast models, supported by information from seven weather stations across the county be noted;**
- c) the gritting network be reviewed to understand how development and changes to the functionality and usage of roads may impact the risk associated with adverse winter weather;**
- d) Scrutiny Committee provides its initial views on the criteria when establishing priority and secondary routes (as set out in paragraphs 14 and 16 of this report);**

- e) work be undertaken to review individual routes in order to contain them within a domain so as to avoid a 'one-out, all-out' approach;

## Alternative options

1. That the highway winter maintenance service continues as operated in 2024/25 and as set out in the Winter Service Plan.

## Key considerations

### Why we provide a winter maintenance service

2. As the local highway authority, Herefordshire Council is responsible for the management and maintenance of almost 2,100 miles of public highway across the county.
3. Under Section 41 (1A) of the Highways Act 1980, the Council has a duty to ensure, as far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice. Reasonably practicable is subjective, and involves balancing the risk against factors such as time, cost and effort. Given the substantial resource required to deliver the Winter Service, it is unreasonable to expect that all routes are kept free from snow and ice at all times, even on treated sections.
4. Section 150 of the Highways Act 1980 imposes a duty to remove obstructions on the public highway, including those arising from the accumulation of snow, on the Highway Authority. This reinforces the need to actively manage and clear snow to maintain access and safety on public highways.
5. The Traffic Management Act 2004 also places a network management duty on the Council. Section 16 requires the Council ensures, as far as is reasonably practicable and with consideration for policy, priorities and other factors, that traffic can move freely and quickly on its road network and those of adjacent authorities.

### How we provide a winter maintenance service

6. The Council's Winter Service Plan explains the arrangements that are deployed for dealing with snow and ice on the county's roads. The Plan outlines how the service will be delivered in line with the winter service policy, which itself has been developed in line with recommendations made in the 2016 Code of Practice: Well Managed Highway Infrastructure as well as from the National Winter Service Research Group (NWSRG) Practical Guide. A copy of the Winter Service Plan is provided at Appendix 1.
7. A team of 48 staff provide the service during a typical season, with further resources called upon such as snow contractors when conditions dictate. Staff are split between two teams, who are on call during the day and during the night on alternate weeks throughout the season, from 15 October to 15 April each year.
8. The team have access to a fleet of 17 gritters that are used to treat the road network and that are tracked at all times and are speed restricted when spreading. The fleet of gritters are supported by two quad bikes with towable spreaders, as well as three dedicated snow blowers, a tractor plough with a towable spreader and a tractor mounted snow blower.
9. Rock salt is used to treat the road network and works by lowering the temperature at which water freezes. As it is unrefined, the salt is brown in colour and is often mistakenly referred to as grit. Salt can work at temperatures down to minus 8 to 10 degrees Celsius, after which it becomes less efficient. Where snow and ice already exist on the road, a mixture of salt and grit can provide traction to vehicles and help break up the frozen surface.

#### When we treat the network

10. Forecast data is provided through the Council's contract with MetDesk Ltd who provide professional weather services, monitoring and providing on call support 24 hours a day, 7 days a week through highly experienced meteorologists. The forecast data draws on extensive dedicated industry and location specific forecast models, supported by information from seven weather stations located across the county and images from traffic cameras on both our network and that of National Highways. Forecasts are received three times a day as standard with the following detail set out on an hourly basis over a period of 24 hours:
  - Road surface temperatures
  - Air temperatures
  - Weather type forecast (dry, damp, wet, rain, dew, hoar frost, ice, snow, sleet, hail or freezing rain)
  - If a hoar frost will occur
  - If ice will form
  - Snow accumulation
  - Wind speed
  - Visibility
  - Precipitation
11. Once received, forecasts are reviewed and a decision taken by a duty decision maker in line with the Winter Service Plan as to what treatment should be undertaken across the network and in what domains and specifically at what time of day or night to ensure the network is treated prior to freezing. The decision is then checked by a verification officer after which it is communicated to the relevant staff and teams deployed.

#### Where we treat on the network

12. Herefordshire's geographical and climatic conditions present unique challenges in terms of delivery of winter maintenance. The county's varied topography, including the Welsh Mountains to the west and the Malvern Hills to the east, leads to diverse weather patterns. To assist with decision making, the county is split into three geographical domains.
13. A network of 15 priority routes exists across the county and provides treatment for 597 miles, or 27% of the overall network. Priority routes tend to represent roads where traffic volumes and/or speeds are higher and so the risk to road safety is similarly high, if untreated.
14. Criteria when establishing priority routes include:
  - The strategic network
  - The principal roads required for economic and community continuity
  - Commuter routes
  - Routes of importance to the emergency services, including the highways that provide access to all operational premises
  - Regular rural public transport routes with weekday frequencies of 2 hours or better

- Known problems, including significant gradients, exposed areas and other topographical factors
  - Public transport routes and access to stations, bus garages and depots; safe and reliable access to emergency facilities including fire and rescue, police, ambulance services and hospitals
15. A secondary network of 25 further routes results in the treatment of an additional 420 miles, or 19% of the overall network when deemed necessary. Secondary routes are not as high risk as the priority routes but a failure during prolonged adverse weather conditions can compromise access to key services and increase the risk of isolation (particularly in rural communities).
16. Criteria when establishing secondary routes include:
- access to all schools from the priority routes.
  - key links to rural communities.
  - key links within urban communities; and
  - regular public transport routes with daily frequencies.
17. Separate to priority and secondary routes, designated locations are also treated, including Hereford High Town, the Market Towns, footways and cycleways and transport interchanges.
18. It is considered that treating 46% of the network is a high proportion and suggests that Herefordshire are currently delivering a highly conservative approach to winter maintenance. It is understood that the gritting network has not been reviewed in a significant period of time. With evolving use of highways over time, it is considered essential that risk is periodically reprofiled to understand how development and changes to the functionality and usage of roads may impact the risk associated with adverse winter weather.

### Historical Trends

19. The number of treatments undertaken on the network will vary from year to year as it is dependant on weather. Between 2021/22 and 2023/24, 219 treatments were undertaken on the network, with 98% or 215 being on the priority network, with only 4 treatments of the secondary network. 81 treatments of the priority network took place in 2021/22 and 79 in 2022/23, typically driving some 48,000 miles per year. 2023/24 saw what was considered a significantly milder winter season, with only 55 treatments taking place, with some 34,000 miles driven.
20. Whilst the county is split into three geographical domains to assist with decision making, current practice means that routes cross into and out of domains, often leading to a 'one-out, all-out' approach, rather than using a targeted domain-based approach to delivery. It is therefore considered appropriate for work to be undertaken to review individual routes in order to contain them within a domain.

### **Community impact**

21. During the winter period, the highway winter maintenance service aims to:
- keep road users safe through effectively managing the risk to the travelling public from the hazardous effects of ice and snow on highway surfaces.

- keep the county moving; maintaining accessibility to services through the availability and reliability of the highway network during the winter period.
- to coordinate our actions in regard to the highway with those that the council undertakes to, so far as reasonably practicable keep both the public and its employees safe as they move around those external spaces for which the council is directly responsible.

## Environmental Impact

22. Any future development of the winter service plan and specifically any potential changes to the gritting network will seek to minimise any adverse environmental impact and will actively seek opportunities to improve and enhance environmental performance.

## Equality duty

23. The Public Sector Equality Duty requires the Council to consider how it can positively contribute to the advancement of equality and good relations, and demonstrate that it is paying 'due regard' in our decision making in the design of policies and in the delivery of services.
24. A full Equality Impact Assessment is not required as a direct result of this report. However, such an Equality Impact Assessment will need to be undertaken to determine the impact on protected characteristics should any review of the treated network be undertaken and any parts removed or added Sections 14 and 16 of this report set out how priority and secondary routes are established.

## Resource implications

25. Total revenue costs of £860k were allocated through the Public Realm Contract in 2024/25 for the provision of winter maintenance based on 83 treatments, as set out in Table 1 below.

<u>Item</u>	<u>Budget Allocation</u>
Winter Standby	£151,842.71
Winter Stand Down	£37,735.54
Gritting Runs	£397,501.81
Salt Bins	£37,723.91
Driver Training	£27,492.13
Footpath Treatments	£7,047.71
Winter Preparedness	£200,633.21*
<b>Total</b>	<b>£ 859,977.02</b>

\*involves maintenance of gritting fleet and provision of other items such as telehandlers and yard operatives during the season

Table 1: 2024/25 Winter Maintenance Budget Allocation

26. Table 1 does not account for:
- a. The cost of purchasing the salt used when undertaking gritting operations and which is purchased by the Council directly. To date, 6,389 tonnes have been purchased in 2024/25 at a cost of £388k and delivered to and stored in salt barns at Thorn and Kingsland depots. There is capacity to store a total of 6,200 tonnes of salt across both sites, with approximately 100 tonnes used per 15g treatment of the priority network across the county. Typically, a stock level of 75% or 4,800 tonnes is maintained to ensure resilience over the winter period.
  - b. The cost of utilising a specialist weather forecasting service provider to accurately forecast road surface temperatures and conditions across the county in order to determine if and when gritting operations should be undertaken. In September 2024, the Council awarded a contract to MetDesk Ltd for a period of up to three years at a cost of £33,697.87 per annum.
27. Whilst a budget allocation is provided based on 83 treatments per year, £895k is currently held in reserves to fund additional treatments should they become necessary.
28. Since 2023/24, £1,402,000 of capital funding from corporate prudential borrowing has been invested in Winter Resilience to enable the purchase of 9 new frontline gritters.

### **Legal implications**

29. Under Section 41 (1A) of the Highways Act 1980, the Council has a duty to ensure, as far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice. Reasonably practicable is subjective, and involves balancing the risk against factors such as time, cost and effort. Given the substantial resource required to deliver the Winter Service, it is unreasonable to expect that all routes are kept free from snow and ice at all times, even on treated sections.
30. Section 150 of the Highways Act 1980 imposes a duty to remove obstructions on the public highway, including those arising from the accumulation of snow, on the Highway Authority. This reinforces the need to actively manage and clear snow to maintain access and safety on public highways.
31. The Traffic Management Act 2004 also places a network management duty on the Council. Section 16 requires the Council ensures, as far as is reasonably practicable and with consideration for policy, priorities and other factors, that traffic can move freely and quickly on its road network and those of adjacent authorities.

### **Risk management**

32. There are no direct risk implications as a result of this report, the purpose of which is to seek the views of the Connected Communities Scrutiny Committee regarding Highway Winter Maintenance.
33. Any recommendations made by Scrutiny Committee will be subject to a Cabinet Member decision that will set out the full risks and opportunities to the council.

### **Consultees**

34. The purpose of this report is to seek the views of the Connected Communities Scrutiny Committee regarding Highway Winter Maintenance.

## **Appendices**

Appendix 1: Herefordshire Council Winter Service Plan 2024/25

## **Background papers**

None identified.



# HEREFORDSHIRE COUNCIL WINTER SERVICE PLAN 2024/25

## CONTENTS

Introduction.....	2
Legal background.....	2
Other considerations .....	3
Financial resources .....	3
Informing future plans.....	3
Herefordshire’s topography and climate .....	4
Winter Service Policy .....	4
Policy introduction .....	4
Winter risk period .....	5
Winter Service Delivery.....	5
Treatment Routes .....	6
Other Locations.....	10
Contingency Planning – Minimum Winter Network .....	13
Organisation – People, Plant & Materials .....	14
People.....	14
Co-ordination & Collaboration .....	17
Plant and Fleet .....	18

Salt Management .....	19
Decision Making .....	21
Service Levels .....	21
Operational Decision-Making.....	23
Information and Publicity.....	25
Media Information .....	25
Information for the Public.....	25
Review.....	26

## INTRODUCTION

Ice and snow affect the safety of the traveling public and the availability and reliability of the highway network throughout the winter period. As such, the successful delivery of the winter service is key to supporting the economic and social well-being of Herefordshire.

This Winter Service Plan explains the arrangements that Herefordshire Council (the “council”) shall deploy for dealing with ice and snow on the county’s roads. It outlines how the service will be delivered in line with the winter service policy, which has been developed in line with the recommendations made in Code of Practice, Well Managed Highway Infrastructure.

The severe and prolonged weather experienced in past winters has had a significant impact on our community and tested the resilience of all our services. Whilst Herefordshire Council’s highway service has coped well it is recognised that there is always potential for improvement.

In developing the winter plan, we have considered recommendations made in the 2016 Code of Practice, Well Managed Highway Infrastructure and the National Winter Service Research Group (NWSRG) Practical Guide.

The arrangements described in this plan will apply to the 2024/25 winter season and for all subsequent winter seasons. This until such time as it is amended and/or superseded by another plan that has been the subject of a decision taken in accordance with the council’s constitution.

---

## LEGAL BACKGROUND

Under Section 41 of the Highways Act, the Council has a duty to maintain the highway.

The Railways and Transport Safety Act amended the Highways Act by adding a Statutory Duty Clause 41.1A concerning dealing with snow and ice. “In particular a Highway Authority are under a duty to ensure, as far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.”

This Winter Service Plan builds upon tried and tested operational standards and is developed to meet the needs of Herefordshire setting out what is “reasonably practicable” for the county.

---

## OTHER CONSIDERATIONS

Whilst the legal obligations of the Council as a highway authority focus on the safe passage of traffic and prolonged and severe winter conditions do lead to significant issues in other areas. Healthcare issues not only result from increases in the likelihood of slips and falls from those who venture out, but from the isolation that can be experienced in both rural and urban situations.

Herefordshire has proven to be resilient as a community when dealing with these issues and this plan identifies the key role that communities play in ensuring local resilience. Working with our partner agencies, Town and Parish Councils, the third sector and individuals, Herefordshire Council hopes to harness this community support and wherever possible, enable communities to help themselves through times when isolation becomes a real issue alongside core road safety duties.

The issue of isolation can be most acute in the County’s rural communities where the distance to a treated road may prevent access and egress for significant periods and it is here that we plan to focus our ongoing efforts. Action has been taken to address this through the parish lengthsman scheme and how it can enable a winter service capability.

Further to its obligations to the people of Herefordshire, the council is also responsible for its own corporate estate. In regard to these external spaces, which are beyond the bounds of the public highway, but form part of the workplace for council employees, the council is responsible for making sure, so far as is reasonably practicable, that these spaces are safe and therefore must take action to reduce (and remove where possible) any risks to safety caused by snow and ice. The obligations, as an employer, have to be met alongside (and in balance with) the council’s obligations towards Herefordshire’s communities. This plan recognises these wider obligations, which are currently met through arrangements that are managed with this winter service plan.

---

## FINANCIAL RESOURCES

In the current financial climate, all public sector services are facing pressures on the available funding and our approach to the delivery of winter service is not immune to an efficiency challenge. However, we are continuing to plan to cope with a severe winter by ensuring that we do address the core requirements of our winter service alongside our other obligations as an employer, which are funded elsewhere. We do this by focusing on a clear set of priorities, we continue to introduce efficiencies and make prudent and timely investments that will best ensure the resilience of the service and deliver a safe and reliable highway network for our customers throughout this coming winter and in future years. The delivery of efficiencies and the monitoring of value for money is achieved through the council’s management of its public realm services contract, which includes winter service within its scope.

We continue to explore the possibilities for savings through our partner organisations. These savings might be delivered through reduced demand on acute care in severe events, as a direct result of increased levels of preventative treatments, particularly on footways, in busier urban areas. Prevention is highly likely to be better, and less costly, than the cure. The use of all cashable savings will be the subject of decisions made in accordance with the council’s constitution.

---

## INFORMING FUTURE PLANS

Changes in the extent and scope of winter treatments can have significant implications for the council and may require significant investment to facilitate the desired change, for example the addition of a road to the priority gritting routes may lead to the need for an additional gritter, driver and salt. We recognise the importance of this service to our communities and our need to further our understanding of what is wanted from our winter service over time. With this in mind, the council seek the views of our customers through the National Highways & Transport (NHT) Network public satisfaction survey. This informs the development of the future service. In addition to this, as for all highway services we welcome comments, requests for service or inquiry through the customer services team

---

## HEREFORDSHIRE'S TOPOGRAPHY AND CLIMATE

The regional climate of Herefordshire is dominated by the topography of the area with the Welsh Mountains to the west, and the Malvern Hills in the east of the County. The climate of Herefordshire is typically warmer and drier in the valleys, and colder and wetter over the hills. This trend can reverse on occasion, especially if frost hollows develop in the valleys to give coldest temperatures between the hills. As such it is imperative that road temperatures are monitored in real time to give the best picture of the microclimate that is developing on any given night

## WINTER SERVICE POLICY

---

### POLICY INTRODUCTION

The Winter Service Plan contributes to the delivery of the four core objectives set out in Well-Managed Highway Infrastructure 2016, which are:

- Safety
- Customer
- Serviceability
- Sustainability

These aims are reflected in our Highways Maintenance Plan and in the delivery of the Local Transport Plan.

Further, the council is directly responsible for a range of public places that are outside the bounds of the public highway and for its own corporate estate, which may not be open to the public, but may be part of the workplace. Employers are responsible for making sure the workplace is safe so far as is reasonably practicable, and therefore must take action to reduce (and remove where possible) any risks to safety caused by snow and ice.

The aims of the winter service during the winter period are:

- To keep road users safe; through effectively managing the risk to the travelling public from the hazardous effects of ice and snow on highway surfaces.
- To keep the county moving; maintaining accessibility to services through the availability and reliability of the highway network during the winter period.
- To coordinate our actions in regard to the highway with those that the council undertakes to, so far as reasonably practicable keep both the public and its employees safe as they move around those external spaces for which the council is directly responsible. This through managing the risk to both the public and employees from the hazardous effects of ice and snow at these various places and alongside (and in balance with) the council's obligations towards Herefordshire's highways.

These aims will be achieved by being pro-active and managing operations using the latest forecast information, appropriate and timely treatments and the local knowledge that exists within the council, our partner agencies and by working with Herefordshire's communities to deliver an effective and efficient service.

---

## WINTER RISK PERIOD

### OVERALL WINTER PERIOD

The Overall Winter Period is from 15<sup>th</sup> October to 15<sup>th</sup> April. Throughout this time forecasting information is reviewed on a daily basis to inform the decision-making process. This period can be brought forward or extended if, on the basis of data, the risk associated with winter weather has been identified and mitigation to that risk requires the extension of the winter period.

### CORE WINTER PERIOD

The Core Winter Period and the main period of risk for the winter service is from 1<sup>st</sup> November until the 31<sup>st</sup> March. The weather is monitored from mid-October to mid-April, which will enable response to any weather events.

There are five main components to the winter plan:

1. **Preparedness** - These are the preparations undertaken by the service prior to the winter season together with the advice and support given to the community to enhance our collective ability to cope with severe winter weather.
2. **Precautionary Salting** - This is the application of de-icers to road surfaces before the onset of freezing conditions (i.e. frost, snow or freezing rain). The purpose of precautionary treatments is to prevent the formation of ice, or to weaken or prevent the bond of freezing rain or snow to surfaces.
3. **Post-treatment** - This is the treatment of ice after it has formed. When ice or snow is forecast to last longer than 24 hours, post treatment will be carried out.
4. **Snow clearance** - This is the process of dealing with snow during and after it has fallen.
5. **Recovery** - This is the work that may be needed following a severe winter to manage the immediate safety hazard resulting from the damage caused to the highway by ice and snow. This, together with the work needed to address the deterioration in surface conditions that may result in the longer term. The response to safety defects across the highway asset is detailed in our Highway Maintenance Plan and the longer term impacts on road condition will be managed through our asset management planning.

## WINTER SERVICE DELIVERY

The winter service has developed over time combining established practices for the clearance of snow and ice with developments in salt products, forecasting technology, route optimisation and global positioning systems. We aim to deliver a service that is efficient and timely. Further we will minimise pollution from the leaching of dissolved salt and to make most effective use of salt by using it only when conditions require.

Materials products and treatments for winter maintenance will be appraised for environmental impact and for wider issues of sustainability.

To ensure timely delivery we ensure that:

- all planned early morning treatments are completed before 7.30am
- our resources are able to respond within 1 hour of an instruction to treat.
- If planned treatment time is more than an hour away, the identified resources respond at the time requested; and that all specified treatment runs are completed in 4 hours.

## TREATMENT ROUTES

### HIGHWAYS

Well-managed Highway Infrastructure

#### RECOMMENDATION – TREATMENT ROUTES

Authorities should define treatment route plans for carriageways, cycle routes and footways for pre-treatment and snow conditions, based upon the general maintenance hierarchy, but adapted to take into account the factors identified by this Code.

### PRIORITY ROUTES

We are responsible for the maintenance of 2044 miles (3291 km) of roads throughout the county. Of these 598 miles (962 km, 29%) have been identified as a first priority whenever carriageway and footway surfaces become, or may become, dangerous through ice and snow.

The treatment routes for Winter Service take as a starting point the hierarchy developed for other maintenance purposes. Maps of all priority routes are appended and can be viewed on the council's website.

As such priority routes are those where traffic volumes and speed are likely to be higher and as such the risk to the safety of road users is similarly high, if they were to remain untreated. The routes take into consideration other criteria including:

- Strategic network (including the Resilience Network) – The principal roads required for the economic and community continuity.
- Commuter routes.
- Routes of importance to the emergency services, including the highways that provide access to all operational premises.

- Regular rural public transport routes with weekday frequencies of 2 hours or better.
- Known problems, including significant gradients, exposed areas and other topological factors.
- Public transport routes and access to stations, bus garages and depots; safe and reliable access to emergency facilities including fire and rescue, police, ambulance services and hospitals.

Treatment of routes will take place in accordance with available forecasts, localised temperature variants and local condition information in order to treat as per the level of Service decision matrix. The aim is to treat precautionary routes in advance of the onset of potentially hazardous conditions.

Domain based forecasting allow for response to varying temperatures across the county with part of the county forecast to be below zero with associated hazards, this will enable partial treatments across the county based on the available forecasts. The following informs of the allocated treatment for Priority & Secondary routes attributed to the Domains, and designated routes for inclusion of Domain based treatments.

<b>Domains</b>	<b>Priority Routes</b>	<b>Secondary Routes</b>
North Domain Routes	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13 & 14	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 22 & 23
Southeast Domain Routes	2, 3, 8, 11, 13, 14, & 15	13, 14, 15, 20, 21 & 24
Southwest Domain Routes	9, 12, 13, 14 & 15	16, 17, 18, 19, 21, 24 & 25

## **SECONDARY ROUTES**

During severe winter periods treatment may extend to other routes. Traffic volumes and speeds on these routes are typically lower than on the priority routes, as such the risk to the safety of road users is less. However, in times of severe, prolonged weather failure to treat these routes will compromise accessibility and heighten the risk of isolation, particularly in rural communities.

During the 2009/10 winter, issues with the availability of salt supplies on a national basis prevented the regular treatment of secondary routes. Recognising that such constraints on the level of service may exist in the future, we have sub-divided the secondary route classification into two, identifying the minimum winter network.

The first division comprises of secondary routes to schools as appended.

These school routes have been established using the following criteria:

- To include access to all schools from the priority routes.

Treatment of these routes will be carried out upon completion of the priority routes or prior where there is confidence in the forecast and an opportunity for a proactive treatment and when schools are expected to be open and subject to the availability of resources.

The second division will comprise of other secondary routes. These routes have been established using the following criteria:

- key links to rural communities.

- key links within urban communities; and
- Regular public transport routes with daily frequencies.

Treatment of these routes will only be carried out upon completion of the priority routes and subject to the availability of resources. When resources allow, treatment may extend to all secondary routes. If resources are limited in any way, then the treatment of the identified school routes forming part of the minimum winter network shall take priority over all other secondary routes.

### **FOOTWAYS AND CYCLEWAYS**

In line with Well Managed Highway infrastructure there is a clear need to consider the needs of pedestrians and cyclists separately to the needs of motorists and other road users. The risk to public safety posed by untreated footways heightens as freezing conditions become very severe or prolonged. As such the decision to treat footways and cycleways will be made alongside the decision to treat other areas and footways & cycleways will not automatically be treated each time we treat our priority routes, but in line with the criteria set out below. We have identified the following classifications of footways and cycleways for treatment:

#### **HEAVILY TRAFFICKED FOOTWAYS**

These include retail zones in Hereford City and the Market Towns, together with the main walking routes between transport interchanges, car parks and these retail zones. These routes also include the main route between these transport interchanges and the main campus for Hereford's colleges and access to the County Hospital.

Treatment of these footways will only be carried out in accordance with Table 1. Treatment will be subject to the availability of resources and the prevailing conditions.

#### **STRATEGIC FOOTWAYS AND CYCLEWAY LINKS**

These are an identified set of footways and cycleways that if treated may provide access for pedestrian and cycle traffic from residential areas to public transport interchanges and the main centres of employment.

Treatment of these footways will only be carried out in accordance with Table 1. Treatment will be subject to the availability of resources and the prevailing conditions.

It is unlikely that we will be able to extend the treatment of footways and cycleways beyond the classifications and circumstances identified above as part of our normal winter service operations. However, we shall undertake ad-hoc treatment of any footway in support of a particular emergency or medical access need, whenever practicable. We will work with Hereford City Council and the Town Councils for our market towns to identify all reasonably practicable opportunities for self-help.

**Table 1 - Winter Service for Footways and Cycleways – Treatment Table**

Notes

1. At all times priority will be given to the priority carriageway network.
2. Combined footway/cycleways are treated in accordance with footway hierarchy.

Category	Overnight Frost Conditions Overnight forecast temperatures below zero	Daytime Frost Conditions Overnight forecast temperatures below zero extending beyond 0800hrs.	Prolonged Daytime Frost Conditions	Snow Events
Category 1a - Hereford High Town Heavily Trafficked Footways in this plan. (see Appendix 12)	No treatment	Inspection where forecast for daytime frosts  Treat as necessary taking a risk-based approach	Monitor and further treatment as required when resources permit, taking a risk-based approach	Snow removal will commence when resources become available from higher priority treatments. Endeavours will be made to commence clearance within 12 hours of cessation of snowfall, subject to availability of resources, taking a risk-based approach. Treatment only during normal working hours.
Category 1 - Heavily Trafficked footways and cycleways identified as Strategic Footways and Cycleway Links in this plan. Other footways and cycleways identified as Strategic Footways and Cycleway Links in this plan. (see Appendix 12 & 21)	No treatment	No treatment	Monitor and treatment as required when resources permit, taking a risk-based approach.	Snow removal will commence when resources become available from higher priority treatments. Endeavours will be made to commence clearance within 24 hours of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.

Category 2  (see Appendix 12 & 21)	No treatment	No treatment	Monitor and treatment as required when resources permit, taking a risk-based approach.	Snow removal will commence when resources become available from higher priority treatments. Endeavours will be made to commence clearance within 48 hours of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
Category 3 - Other Routes	No treatment	No treatment	Reactive treatment not normally undertaken other than in response to specific circumstances, taking a risk-based approach.	Snow removal will commence when resources become available from higher priority treatments. Endeavours will be made to commence clearance within 5 days of cessation of snowfall, subject to availability of resources. Treatment only during normal working hours.
Category 4 - Other Routes not as above.	No treatment	No treatment		

---

#### OTHER LOCATIONS

If severe conditions persist, then treatment of other locations may be carried out as needed, subject to the availability of resources. We shall consider the ad-hoc treatment of any location in support of a particular emergency or medical access need as identified through our partner agencies. Emergencies could include support to police for a reported RTC, a utility water leak, gaining access to properties for medical emergencies, supporting the fire/ambulance service. A decision will be made in all instances by the Duty Control Officer on duty as to whether or not treatments should be provided.

We will work with the Town and Parish Councils and others to identify all reasonably practicable opportunities for self-help.

### **CAR PARKS**

Taking a risk-based approach consideration will be given by the Duty Control Officer to treating Council run public car parks in Hereford City and the Market Towns when surface temperatures are predicted to remain below freezing for 24 hours or more ice is predicted.

Treatment will be subject to the availability of resources and the prevailing conditions.

Where the car park is accessible by our gritters, treatment will typically be delivered as part of our planned gritting routes.

Well-managed Highway Infrastructure

#### **RECOMMENDATION – TREATMENT ROUTES**

The treatment of bus routes should be based on risk assessment of local circumstances such as service frequency and their importance to integrated transport services. It is important that treatment routes include the access roads to bus garages.

### **PUBLIC BUS ROUTES**

Rural bus routes which have weekday frequencies of 2 hours or more are included as priority routes. Bus routes with daily frequencies are included as secondary routes. As part of the review of the impact of the 2009/10 winter the issue of the treatment of the bus stops located at Tesco Hereford City Centre store was identified. This site is effectively a public transport interchange and we treat this site whenever surface temperatures are predicted to remain below freezing for 3 days or more and ice is expected. Treatment will be subject to the available resources and the prevailing conditions and sustained treatment will inevitably be compromised without the cooperation and financial support of the store.

### **SCHOOL TRANSPORT ROUTES**

It is impracticable to extend our winter service treatments to include all school transport routes, in severe and prolonged winter conditions our treatment coverage will extend to include the access to all schools in the county. Through this approach the majority of these routes will be catered for as our resources can reasonably allow. Through our proposals for self-help in the community and with better communications with the education service we may be able to facilitate the treatment of identified problem sites in times when accessibility and isolation may become a significant risk.

In prolonged and severe weather some schools are unable to treat their coach turning areas and this leads to pupils having to alight to a busy public highway. This increases the level of risk for pupils and other road users alike. We treat these sites as transport interchanges and whenever surface temperatures are predicted to remain below freezing for 3 days or more and ice is expected we will arrange for the following sites to be treated as part of our gritting runs:

- The Lady Hawkins School and
- St Mary's RC School, Lugwardine.

We will continue to work with bus operators where appropriate to ensure buses reach essential routes so far as may be reasonably practicable. All treatment will be subject to the availability of resources and the prevailing conditions.

## OTHER ROUTES – THE PROVISION OF SALT BINS

### Well-managed Highway Infrastructure RECOMMENDATION

#### – PROVISION OF SALT BINS

One means by which authorities can assist the local self-help in areas not on priority routes or at known trouble spots, including gradients and sharp bends is by the provision of public access salt bins. Where these are provided authorities should make arrangements for their replenishment as necessary

Town/Parish Councils are able to purchase salt bins for locations where they improve road safety and benefit the community. Following the request for a salt bin, the proposed site will be inspected and considered, taking a risk-based approach, in consultation with the relevant town or parish council. Requests and reviews will consider local needs and available resources.

Salt bins will normally be yellow in colour, but black or green bins may be provided in line with the design guidance for Areas of Outstanding Natural Beauty, or in other environmentally sensitive areas, or by particular request of the local council. Grit bins will normally have a hinged lid, so that the salt is protected from rain, and will normally be approximately 200 litres in capacity.

Salt bins will not usually be provided:

- on roads that form part of priority routes;
- where they attract anti-social behaviour or cause nuisance to nearby residents;
- where their provision would create a further proliferation of street furniture to the detriment of disabled or visually impaired people and/or the community;
- without the agreement of the relevant Town or Parish Council; or
- on un-adopted highways whether subject to future adoption or not. i.e. development sites where the responsibility for maintenance remains with the developer until completion of formal adoption by the highway authority.

The salt/grit provided in these bins is for spreading on the public realm, and unauthorised use of this salt to treat other premises will be considered as an act of theft.

We aim to have all our salt bins full in advance of winter and seek to maintain these stocks throughout the winter season. Re-stocking shall normally take place in January, if required, subject to weather conditions or following any request to do so from our customers. Our ability to maintain the salt/grit stock in the salt bins will be dependent on the available resources and the prevailing conditions. In severe and prolonged winter weather we may not be able to carry out any re-stocking, as our resources will have to be directed towards treating our roads and footways in line with the priorities set out in this plan.

We will, as part of our asset inventory, develop and maintain details of all our salt bins. Through this inventory and the intelligence that we can gather on the usage of salt/grit at each site we will develop our re-stocking arrangements in line with the demand for salt/grit at each location. Where usage is high and it is confirmed that the salt/grit is being used on the highway, we may supplement the existing salt bin provision following assessment. Similarly, we will seek to withdraw grit bins from locations where they are not used. Whenever such sites are identified we shall consult with the relevant Town or Parish Council before deciding whether or not to remove the grit bin(s).

### **LEVEL CROSSINGS**

Spreaders are to be switched off across level crossings so that salt does not fall between the stop lines. If plough blades are being used, they will be lifted between the stop lines. Snow blowers will not be used on level crossings. There are level crossings at the following locations:

- B4361 – Easters Mart, Leominster, grid reference: 350012/259796;
- B4348 – Tram Inn, grid reference: 346399/233579;
- C1122 – between Wellington and Marden, grid reference: 351134/248112; and
- C1120 – between Moreton-on-Lugg and Marden.

### **DRAINAGE ISSUES**

Through our highway inspection regimes, as specified in the Highway Maintenance Plan (HMP), we shall identify defects on our priority treatment routes that have a high risk of drainage issues causing ice to form on the highway, despite precautionary gritting. The risk associated with each identified defect shall be assessed in accordance with the criteria established in the HMP and mitigation actions shall be identified for each site so as to manage the likelihood and/or severity associated so that the risk presented is at a level which allows the defect to be regarded as no higher than a Category 2b defect.

All defects will be processed initially by the Operational Control Hub (OCH) for further action by the appropriate department. These mitigation actions will be delivered through the reactive, routine or programmed works activities all in accordance with the timescales established through the Highway Maintenance Plan.

### **DIVERSION ROUTES**

Diversion routes shall be treated to at least the standard required for the diverted route. When selecting diversion routes during the winter season consideration shall be paid to the extent of the priority routes and for the potential need for a proposed diversion route to be inspected to ascertain its suitability for gritting prior to being used.

We will seek to raise awareness of any diversions through liaison with partner organisations and the issue of guidance as part of our communications.

### **TRUNK ROADS AND MOTORWAYS IN HEREFORDSHIRE**

National Highways (NH) is responsible for the management of the Trunk Roads and Motorways in Herefordshire. The A49T, A40T and the M50 fall within their Area 9 and the services for this area are delivered through their agents.

### **OTHER PUBLIC PLACES**

We will, wherever practicable, coordinate our winter service with the activities deployed to address the impact of snow and ice on all other public places throughout Herefordshire.

## THE COUNCIL'S CORPORATE ESTATE.

We will, wherever practicable, coordinate our winter service with the activities deployed to address the impact of snow and ice on the council's corporate estate.

## SCHOOLS

We will, wherever practicable, coordinate our winter service with the activities deployed by Schools to address the impact of snow and ice on school grounds.

---

### CONTINGENCY PLANNING – MINIMUM WINTER NETWORK

A number of Contingency plan provisions are in place for a variety of events, such as Salt supplies, Fuel Shortages, Flooding, Pandemics, etc. In these events provisional plans include utilisation of employees from other business areas, including support from subcontractors with appropriate LGV licenses utilised, additional plant support available from BBLP's national providers, increased implementation of Auto-gritting systems within the fleet & resource level availability for Co-Drivers and following current Government Guidance.

Past winters have seen the nation experience difficulties with the supply of road salt. Whilst Herefordshire Council has never had to constrain the extent of its gritting operation to less than its priority routes, plans are in place for a phased reduction in the extent of the routes that would be treated if the salt availability is severely compromised, or an equivalent constraint prevailed.

This option shall only be actioned if all other contingency options, such as the use of alternative salt supplies and reduced or variable spread rates, have been exhausted.

The decision to rationalise the extent of treatment in this way may be taken by the Chief Executive, relevant Director, or the Acting Assistant Director (Highways and Transport), taking a risk-based approach. The decision to rationalise routes in this way shall be made following consultation with partner organisations and other local neighbouring authorities as part of an emergency response (Silver Control).

If taken, the communication of this decision to all highway users will be critical to the management of the consequential risk. Guidance on the trigger levels for this action together with plans identifying the routes to be treated (minimum winter network) in each phase of rationalisation are appended.

### SNOW CLEARANCE CRITERIA & AREAS

When actively ploughing, HC Gritters will be assigned a Co-Driver (Plough Mate) to accompany the driver when deployed until such point they are deemed unnecessary and/or other events supersede any requirement. In times of heavy snowfall arrangements are in place for a number of contractors distributed across the county to clear local roads. Each contractor will operate within a defined area and will be mobilised to take action following a risk-based approach. The decision for action will remain with the Duty Control Officer, in conjunction with approval and instruction from Herefordshire council to operate these services in a civil emergency.

---

## ORGANISATION – PEOPLE, PLANT & MATERIALS

---

### PEOPLE

#### OVERALL RESPONSIBILITY

As the Highway Authority Herefordshire Council has the overall responsibility to provide an effective Winter Service, all in accordance with its duties. The responsibility for the efficient and effective delivery of winter service operations

across the public realm sits with Balfour Beatty Living Places

Herefordshire Council and Balfour Beatty Living Places are committed to working together to improve the service. This has led to a shift in responsibilities within the partnership towards those who are best placed to make the decisions required to enhance the level of service delivered to Herefordshire's communities.

The highway service also plays a key role for the Council in any emergency response to the severe weather and operates as a category 1 responder under the Civil Contingencies Act, with partner agencies to prepare, respond and recover from the impact of any severe weather event, including the effects of freezing temperatures, ice and snow. The Council's overall response in such circumstances is coordinated through its Emergency Planning team in line with Herefordshire's Multi Agency planning provisions.

### **Acting Assistant Director (Highways and Transport)**

The Council's Acting Assistant Director (Highways and Transport) will provide strategic oversight of the winter service delivery and will liaise with others to ensure that all personnel, plant and systems as set out in this plan are available for the winter season.

### **SERVICE DELIVERY PARTNERS**

Balfour Beatty Living Places are the Council's principal delivery partner and will manage the operational delivery of the winter service in accordance with this plan.

Many of the Council's other delivery partners have made commitments to contribute to the delivery of the winter service. These include FCC, who deliver waste management services who have committed to make waste collection resources available for the clearance of snow and similar winter maintenance activities when they are unable to deliver waste management services.

The Health and Safety of all staff is a particular concern during winter operations and a clear set of criteria for the safe deployment of our partners' staff will be developed and managed by Balfour Beatty Living Places. This is expected to include the training requirements associated with particular operations or locations.

### **WINTER COORDINATOR**

Balfour Beatty Living Places will appoint a Winter Coordinator who will be responsible for:

- maintaining all data, rotas and plans in regard to winter service;
- undertake weekly and monthly data quality audits; and
- support the operational delivery of winter gritting and snow clearance.

### **DUTY CONTROL OFFICER (DCO)**

Duty Control Officers (DCO) will be appointed by Balfour Beatty Living Places, prior to the commencement of the winter season. The DCO will cover a 24-hour period and will be on duty one night in three. The DCO will lead a daily winter review meeting along with key members of the winter management team including the Winter Manager and Winter Coordinator. Decisions about action to be taken will be agreed at these meetings.

Balfour Beatty Living Places will maintain the salt stock records and HC will liaise with the salt supplier. Salt usage data will be recorded in Vaisala Road Manager and will be monitored on a daily basis at the winter review meeting.

### **VERIFICATION OFFICER (VO)**

The Verification Officer is responsible for verifying the decision made by the Duty Control Officer and is available to provide support to the DCO where required or in order to respond to changing weather conditions.

## INSPECTION TEAMS

We operate a minimum of 3 Inspection Teams, each comprising 2 people and, if possible, a reserve. Each team will be on call every third night, as shown in the Control Rota. The inspection team will co-ordinate with the DCO who will make the treatment decision based on the current forecast and the inspection teams' findings. Inspections will be carried out on two inspection routes designed to ensure cold spots and potential high-risk areas are monitored. Inspection routes are appended.

Well-managed Highway Infrastructure

### RECOMMENDATION – TRAINING AND DEVELOPMENT

Delivery of a successful Winter Service is dependent on the individual decisions made and actions taken by all those involved. These actions and individual decisions must be supported by adequate training of the staff and operatives involved.

## TRAINING & DEVELOPMENT

Any new staff involved with the delivery of winter service will receive a full induction to the service to ensure they are familiar with the procedures and systems in place. The following will be included in the training plan for all winter drivers:

- the extent of the council's obligations in regard to winter service;
- the content and operation of the Winter Service Plan;
- route familiarisation (as appropriate);
- Forecasting and monitoring?
- driving in difficult and hazardous road conditions including duty of care to other road users;
- circumstances where special safety considerations apply;
- snow ploughing, in particular around rail level crossings and partially segregated areas;
- dealing with emergencies; and
- dealing with post ice and snow emergencies especially flooding.

All gritter drivers will undertake familiarisation runs prior to the start of the season. Further familiarisation will be carried out during the season for new/additional drivers.

Any new inspector will undergo a minimum of 2 familiarisation runs alongside an experienced inspector. Training received by all staff including toolbox talks and dry runs will be recorded in training logs.

Annual training will also be provided on the forecasting system to all staff involved in the delivery of winter service. All decision makers will be accredited with the IHE Professional Certificate in Winter Service Operations which is now the benchmark qualification amongst practitioners.

## **BRIEFINGS**

Prior to the start of each season, Balfour Beatty Living Places will hold a briefing session for all staff and contractors involved in the delivery of winter services. The purpose of this is to confirm arrangements for the coming season and update on any changes.

A mid-season review meeting will be held by Balfour Beatty Living Places to discuss any issues arising during the season. This will be attended by the Operations Manager, Winter Manager, DCO's, VO's and any other appropriate staff.

There will be a de-briefing held at the end of each season. This provides an opportunity for all staff from across the partnership to provide feedback on any problems encountered and ideas for continuous improvement.

Where issues arise at other times during the season, these should be raised with the Winter Manager. The Winter Manager will advise or arrange other meetings as appropriate.

---

## **CO-ORDINATION & COLLABORATION**

Well-managed Highway Infrastructure

RECOMMENDATION – COORDINATION & COLLABORATION

Authorities should consider whether collaborative arrangements such as shared services, lead authority arrangements, collaborative service procurement, and sharing depots and salt stock, would provide an effective and value for money approach to Winter Service resilience.

## **LIAISON ARRANGEMENTS WITH OTHER LOCAL AUTHORITIES AND HIGHWAYS ENGLAND**

The following Highway Authorities border Herefordshire:

- Worcestershire
- Powys
- Gloucestershire
- Monmouthshire

Where there is a cross border working arrangement with each county, we shall seek to confirm the commitment to treat each other's' routes in formal agreements. All agreements, formal or informal with neighbouring authorities are detailed in the appendices.

Throughout the winter season there will be regular communication with neighbouring authorities to inform them of each other's decision. Vaisala Roads Manager will be used to manage communications, including email notifications to neighbouring authorities and text communications to drivers. Notifications will be triggered automatically when a decision is recorded on Vaisala Roads Manager.

National Highways are responsible for treatment of Trunk Roads and Motorways within the county.

Balfour Beatty Living Places work closely with National Highways and their delivery partners, historically reciprocal arrangements in place for the sharing the Bury Court Depot (Highways England) and Thorn Depot (Herefordshire Council). This working relationship has enabled better access to the network and provides resilience in service delivery. Close working may trigger similar arrangements in the future.

---

## PLANT AND FLEET

A range of vehicles, plant and equipment is used to deliver the Winter Service. To ensure the fleet is well maintained, calibrated and reliable an extensive programme of servicing and maintenance is delivered in the summer months.

Decisions on fleet and vehicle replacement are taken in line with the Herefordshire Council replacement strategy and taking into account operational requirements for gritting on the primary and secondary networks. The fleet make up is sufficient to enable all gritting routes to be completed at the same time, and additional resilience is provided through the provision of 2 spare vehicle.

### CALIBRATION

Prior to the commencement of the winter season, each vehicle will be calibrated by a qualified calibration company, to ensure that specified rates of spread are achieved. Calibration certificates, as provided for each vehicle by the calibration company, will be kept on the winter file.

Vehicles will be calibrated once a season, unless there is a particular concern with any individual vehicle. All gritters will be calibrated for 6mm dry salt. Calibration will be arranged by Balfour Beatty Living Places.

### SNOW BLOWERS

A fleet of snowblowers and a Tractor Fitted Snowblower are maintained and will be deployed where required. Details of each snowblower will be maintained by Balfour Beatty Living Places.

### OTHER EQUIPMENT

A minimum of 2 Quad bike towed spreaders will be provided for the treatment of footways in Hereford City, the market towns and in villages. Hand propelled spreaders will be provided as necessary. Details of all other equipment will be maintained by Balfour Beatty Living Places.

### GPS AND VEHICLE TRACKING

All gritters have realtime Global Positioning Systems (GPS) capabilities through a Masternaut tracking system. The system records vehicle movements and times, vehicle speeds, whether the vehicle is spreading or not and the rate

of salt application. This information can be used to confirm each night's actions, which is of particular benefit when treatment moves to secondary and other routes, which may be less familiar to gritter drivers.

## FUEL SUPPLIES

Sufficient fuel supplies are to be maintained, controlled and monitored by all depots to service all vehicles for continuous operation. These supplies are controlled and monitored by Balfour Beatty Living Places.

## ADVICE ON THE USE OF RED DIESEL

The HM Revenue & Customs has previously confirmed 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 specifically constructed or adapted for dealing with frost, ice and snow – such as a snow plough – can work on public roads while using red diesel. Recognising the vital role played by farmers in helping to keep rural roads clear, we have welcomed the pragmatic approach that has been adopted by HM Revenues and Customs, during clearly recognisable periods of extreme weather. This has enabled tractors to use red diesel on public roads whilst clearing snow or gritting to provide access to schools, hospitals, a remote dwelling, or communities cut off by ice and snow.

Detailed guidance on the use of Red diesel are available on the HM Revenues & Customs website or by using the following link: <https://www.gov.uk/guidance/using-rebated-fuels-in-vehicles-and-machines-excise-notice-75#when-you-can-use-rebated-fuel>

---

## SALT MANAGEMENT

Salt supplies are obtained via a regional framework contract that allows the use of multiple suppliers and utilises the collective influence of multiple local authorities to manage the supply chain. This framework is run for the participating local authorities by the Eastern Shires Purchasing Organisation (ESPO). Balfour Beatty Living Places, as the Council's service provider undertakes to work with the Council's preferred suppliers to ensure the delivery of supplies in order to maintain agreed stock levels, as appended.

This framework agreement includes salt supplies sourced from overseas and we have sourced salt through this route in order to secure the required stock level in advance of the winter season. The aim is to ensure that salt stocks are at 6,200 tonnes for the start of the winter season.

In support of the national and regional salt supply resilience proposals a 2 stage strategic audit of salt supplies will be undertaken:

**Stage 1-** Pre-season target is to hold 6,200T at this stage. Maintain stock thresholds to restock at 75% capacity. (Thorn - 3300 Tonnes/Kingsland -1500 Tonnes)

**Stage 2** – Salt levels will be measured at the end of December and at this stage stock levels will be reviewed, based upon the severity of the winter to date, known forecast information and the capacity in the supply chain.

Salt stock levels are based on analysis of the planned network coverage and previous years' experience of the salt used and the resilience that has been achieved, together with knowledge of the capacity that exist in the supply chain and its ability to deliver. A bi-annual survey will be carried out of salt barns to establish accurate stock levels.

## SALT SPREAD RATES

The tables below take into account guidance and utilise best practice gained from local knowledge and experience of past winters. Rates of spread will be 8 g/m<sup>2</sup> unless conditions dictate otherwise. Previous

treatments, residual salt, road conditions and water run off will inform the risk based approach to treatments.

Table 3 - Decision Making – Spread Rates

Weather Conditions Road Surface Conditions Road Surface Temperature (RST)	Air Temperature	Treatment Rock Salt (g/m <sup>2</sup> )		Ploughing
		Dry/Damp Road	Wet Road	
Frost or forecast frost RST at or above -3°C		8	8	No
Frost or forecast frost RST at or below – 3°C and above – 5°C		15	15	No
Frost or forecast frost RST at or below – 5°C and above – 10°C		15	2 x 15	No
Light snow forecast			15	No
Moderate/Heavy snow forecast			15	No
Ice formed (minor accumulations)	Above – 5°C		15 (Successive)	No
Ice formed	At or below – 5°C		15 (Successive)	No
Snow covering exceeding 50 mm			15 (Successive)	Yes
Hard packed snow/ice	Above – 8°C		15 (successive)	No
Hard packed snow/ice	At or below – 8°C		Salt/abrasive (successive)	No

Well-managed Highway Infrastructure

#### RECOMMENDATION – MUTUAL AID

Authorities should explore the potential for mutual aid in salt supply and other aspects of Winter Service and should make contingency arrangements in advance.

#### ALTERNATIVE SALT SUPPLIES AND MUTUAL AID

A number of alternative suppliers for salt products have been identified to ensure delivery of the core winter service throughout. Details of these suppliers and their outline capabilities are included in the appendices.

In addition to this Mutual Aid arrangements are in place through which Herefordshire Council can either gain or offer support to other local authorities as the need and the service capacity to do so requires, the detail of these

mutual aid arrangements are in the appendices.

## **SALT MONITORING**

Amounts and type of salt usage are to be recorded for each depot and supplied to the Salt Administrator each week throughout the winter period. Salt records will be maintained in Vaisala Road Manager. When salt levels meet re-stock thresholds the salt administrator will place an order for a restock. In severe weather, this will happen on a more frequent basis. Close, daily monitoring of salt stock levels enables action to be taken to secure re-supply if stocks are being depleted rapidly. Within Thorn Depot utilisation of the weighbridge will detail the Salt usage weights by calculating prior & post vehicle weights. Records of these will be kept

Salt stocks will be reviewed during daily winter reviews which will take account of: -

- Current stock level;
- Weather forecasts;
- Forecast winter action plans;
- Predicted salt usage;
- Minimum salt stock levels; and
- Seasonal holiday period.

Once a month a salt stock check and storage condition check is arranged by the Salt Administrator. Any discrepancies in the salt stock will be communicated to the Acting Assistant Director (Highways and Transport). Any problems with the storage condition will likewise be communicated to Balfour Beatty Living Places.

## **SALT CELL**

A national 'Salt Cell' is run by the Department for Transport (DfT). Herefordshire Council has participated fully in these arrangements and through doing so has assisted in the appropriate distribution of salt stocks on a regional and national basis.

Information will be made available to the DfT regarding stock levels and winter plans and reasonable action will be taken to ensure supplies of salt to the County and region are more resilient under all but the most exceptional circumstances.

## **ENVIRONMENTAL MANAGEMENT**

Salt shall be stored to minimise pollution from the leaching of dissolved salt and to make most effective use of salt by using it only when conditions require. In this way the service will contribute towards sustaining Herefordshire's biodiversity and character.

## **DECISION MAKING**

### **SERVICE LEVELS**

Plans are in place for a phased reduction in the extent of the routes that would be treated if (for example) salt availability is severely compromised. The decision to rationalise treatment in this way would be a distinct change in the level of service offered to customers. That change will have come about following an assessment of our capability to deliver at the normal service level, which will have identified that we could not sustain normal levels of service throughout the forecast period of severe weather.

The level of service that we can offer does vary through the winter season and depends upon the weather that is forecast. By way of illustration, we may have the capability to extend our treatment widely in response to a comparatively short but very severe period of snow and ice towards the end of a mild winter season. By contrast, we may have to rationalise treatments to the priority routes only if the winter season has demanded frequent treatment and salt supplies are under pressure nationally.

To help our customers understand the levels of service that they can expect from us, we have identified 5 levels: Normal; Enhanced; Constrained; Rationalised and Severely Rationalised. The table on the next page sets out the extent of treatment that can be expected at each level of service.

Location/ Level of Service	Priority Routes – As Forecast required	Secondary Routes– Schools	Secondary Routes– Other	Heavily Traffic Footways	Strategic Footways & Cycleway	Other Locations	Car Parks	Public Bus routes	School Transport routes
Normal Pre Treatment	Y	N	N	Y	N	N	N	N	N
Normal Post	Y	Y	N	Y	Y	Ad-hoc	Y	Y	Y
Normal Snow Clearance	Y	Y	Y	Y	Y	Ad-hoc	Y	Y	N
Enhanced Pre	Y	Y	N	Y	N	N	Y	N	N
Enhanced Post Treatment	Y	Y	Y	Y	Y	Ad-hoc	Y	Y	Y
Enhanced Snow Clearance	Y	Y	Y	Y	Y	Ad-hoc	Y	Y	N
Constrained Pre	Y	N	N	N	N	N	N	N	N
Constrained Post Treatment	Y	Y	N	Y	N	N	N	N	N
Constrained Snow Clearance	Y	Y	Y	Y	N	Ad-hoc	Y	Y	N
Rationalised Pre-Treatment	As Appendix 19, Priority	N	N	N	N	N	N	N	N

Note – The operational decisions to treat each route or location will be made as per the relevant area of this plan.

An assessment of our strategic capability shall be undertaken on a regular basis as part of the daily decision making or as a result of a significant event that is likely to change our capability to deliver. At the start of the Winter Season the level of service will be at the 'Normal' level. Operations will then be managed to deliver at the established level of service. In periods of constrained or rationalised service an escalation process would be introduced to manage decision making.

## OPERATIONAL LOG

All winter treatment decisions will be made by the Duty Control Officer. However, in periods of severe weather additional staff may be consulted where necessary to assist with decision making.

During severe conditions a diary with a running record of all reports, times and action taken will be maintained this will be recorded electronically on a daily basis in Vaisala Roads Manager. This is a road weather software system that provides the decision maker with a complete set of tools to support operational decisions including access to weather data, historical information and predictions of conditions in the future. These road weather forecasts allow proper planning, using all the information to enable effective decision making. The system records treatment decisions made allowing for effective audit and review throughout the season.

Whenever practicable this log will be supplemented by a photo gallery of before and after treatment to support communications and demonstrate effectiveness.

---

## OPERATIONAL DECISION MAKING

Operational decisions will normally be made by the designated Duty Control Officer

The decision for ordering treatment may be based on a combination of weather forecasts, consultation and site inspections.

### FORECAST DATA

We subscribe to a winter forecasting service during the months of October to April and receive the following via the Vaisala Bureau Service:

- 5 day forecasts;
- 24 hour forecasts;
- Ice prediction graphs;
- Road surface condition information;
- 24 hour consultancy service from the MetDesk; and
- Ice prediction web page.

The forecasts are based on global and national information supplemented by 7 roadside weather stations strategically placed at sites throughout Herefordshire. We will continue using this domain based forecasting as the basis for our decision making throughout the season.

## DECISION PROCESS

### RECOMMENDATION – Decision making.

Authorities should take full advantage of decision support systems and services to enable timely, efficient and accurate decision making.

The County Council maintains a contract with an appropriate forecasting organisation that provides daily weather forecasts that are detailed for Herefordshire and updated frequently. In addition, forecasters are available at any time of the day or night to discuss the forecast and changes in conditions. Additional real-time information is provided by a network of roadside sensor stations around the county that report on air temperature, ground temperature, relative humidity and other related measures. The decision will usually be based on interpretation of the weather forecast by the Duty Control Officer (DCO). This will normally be undertaken between 1200 and 1300, if available forecast information allows, and will result in one of the following:

1. Standby and Inspection Patrol.
2. Treatment at specified times.

3. No Action.
4. Further monitoring.

The DCO will be responsible for:

- Organising action based on the forecast received, liaising with others as necessary.
- Informing the duty supervisors of the decision.
- Informing the designated inspection team of the decision.
- Informing emergency duty officers of the decision.
- During the working week inform the Acting Assistant Director (Highways and Transport).
- Inform neighbouring authorities, National Highways and their agents of our decision.
- Placing necessary works orders.
- Updating Vaisala Road Manager
- Sending of comms, including automated texts and tweets through ~~Me~~Desk
- Ensuring decision is verified by the designated verification officer.

### **ACTION REQUIRED**

Operational staff will be informed that action is required by phone and text.

The following day, or as soon as possible Vaisala Road Manager will be updated with the actual time that gritters left the depot and the time routes were completed. Winter action start and finish times are also recorded within Vaisala Road Manager.

### **INSPECTIONS**

When requested by the Duty Control Officer, the Inspection Team will normally commence at 2.30 am unless notified otherwise. Each member will drive their inspection route and will communicate their findings amongst the team. The DCO will also review the available forecast information at regular intervals. The team will decide what action is to be taken. This will be:

- No action;
- Full salt of all routes;
- Treatment of selected routes; or
- Ad-hoc patches – in particular known icy areas or trouble spots.

### **WINTER RECORDS**

Winter records maintained electronically in Vaisala Road Manager will include:

- Daily Decision Records;
- Salt usage;
- Weather records; and
- Operational Log.

A separate record will be kept to include:

- Plant and equipment records;
- Driver hours;
- Minutes of meetings; and
- Other relevant documentation.

## **INFORMATION AND PUBLICITY**

Balfour Beatty Living Places will be responsible for providing winter service information to Herefordshire

Council's Communications Team. Information is supplied on a regular basis during periods of adverse weather.

Communications are supplied detailing the following:

- Roadclosures;
- Driving advice;
- Gritting routes; and
- Snow clearance.

Communications protocols are adhered to in line with Herefordshire Council policy.

All current contact details including e-mail and mobile phone numbers are listed in the appendices.

## Media Information

In order to ensure that consistent information is provided, contact with the media on winter service operations will be through BBLP's Knowledge Centre in consultation with the Council's Communications Team. Local press, radio and TV stations provide an invaluable service, making the public aware of winter problems and providing proactive information including travel information, network availability and risk of severe conditions such as snow and black ice.

Twitter notifications (tweets) are also sent out as necessary via ~~Me~~Desk by the on duty DCO and/or Comms team when action decisions have been confirmed.

---

## INFORMATION FOR THE PUBLIC

### Well-managed Highway Infrastructure

#### RECOMMENDATION – Information for the public

Authorities should ensure effective communication of information for the public before and during both normal and severe winter conditions.

## ADVICE AND GUIDANCE

Information is made available to members of public on the winter work carried out by Herefordshire Council to maintain safety on the roads. This information is available on the Herefordshire Council website and reviewed annually.

Information is provided about the priority routes across the county on a map, together with more detailed maps of Hereford and each of the market towns. Contact telephone numbers for core hours and out of hours are also provided. A section of general information and useful driving tips and considerate parking (to enable snow clearance operations to take place) is also incorporated.

Information and advice is also provided on clearance of footways and roads through self-help. The snow code provides helpful advice to members of the public about how they can provide help in a safe way.

Whilst we may not be able to communicate the full range of potential responses to the winter weather, we will also provide some guidance on the levels of service that can be expected by our customers through the winter. We recognise the increasing desire for 'real time' information to be posted on the website, enabling customers

to make informed decisions about travel in severe weather. To support this, real time communications will be enhanced through use of relevant social media channels.

We will look to provide, where possible, high quality and timely information about winter service activities, particularly during severe or prolonged winter weather. We will continue with our use of Twitter via MetDesk and explore the use of multimedia communications, jointly with other services and agencies.

### **COMMUNITY SELF HELP**

Whilst the legal obligations of the Council as a Highway Authority focus on the safe passage of traffic it's recognised that prolonged and severe winter conditions can lead to isolation being experienced in both rural and urban situations. The issue of isolation can be most acute in rural communities where the distance to a treated road may prevent access and egress for significant periods.

The existing parish lengthsman scheme was developed to enable a winter service capability in those parishes where:

- there is a higher risk of isolation;
- the risk cannot be realistically managed through the provision of grit bins; and
- the parish have the capacity to respond to that risk through self-help in the community.

The following agreement can be put in place with Parishes that are members of the lengthsman scheme.

- Salt storage must meet environmental standards;
- The purpose is to tackle issues of isolation due to severe or prolonged winter weather, so self-help action through this initiative must only be taken during these circumstances; and
- Salt will be supplied by Herefordshire Council as resources allow and shall only be used for highway purposes.

## **REVIEW**

### **WINTER SERVICE REVIEW**

The Winter Service Plan will be reviewed annually and approved by the Service Director Environment and Highways prior to the commencement of each winter season.

All vehicles, plant, fuel provision, equipment and maintenance arrangements will be checked annually and in accordance with manufacturers' requirements to ensure that any necessary action can be taken to ensure full Operational service status prior to the Winter Service season. This will include checking the calibration of all de-icing equipment and spreaders.

The Annual Review will include analysis on whether service delivery meets the Winter Service policy and plan. Service efficiency improvements such as route optimisation will also be taken into consideration.

Following any significant winter weather event, a formal review involving representatives from all levels of the management and delivery of Winter Service will be carried out. The review is intended to identify the successful elements of the service as well as potential improvements and actions to be taken. Where applicable, other stakeholders will be invited to provide feedback. Lesson learned will be captured and actioned and this will feed into the Annual Review of the service.

## Appendices

1. Priority routes
2. Secondary routes
3. Inspections routes
4. Snow clearance areas
5. Duty Control Officer, Inspection Teams and Supervision Rota
6. Depots and saltstocks
7. Winter Maintenance Contact Details
8. Cross boundary arrangements
9. Weather Stations
10. Contingency Planning – Route Rationalisation- Minimum network – Alternative salt products
11. Community self-help arrangements
12. Plans of footways for treatment
13. Information on On-site Mixing of alternative products
14. School sites to receive on site treatment of coach turning areas.
15. Car Parks and transport interchanges for treatment
16. Mutual Aid Arrangements
17. Salt Monitoring Arrangements
18. Grit Bin Assessment form
19. Advise on litigation arising from self-help.
20. Communications Plan
21. Plans of Cycleways for treatments

