

**REPORT TO:** Cabinet Member Technical Services  
Cabinet

**DATE:** 26<sup>th</sup> January 2011  
27<sup>th</sup> January 2011

**SUBJECT:** Winter Service Interim Report

**WARDS  
AFFECTED:** All

**REPORT OF:** Peter Moore  
Environmental & Technical Services Director

**CONTACT  
OFFICER:** Jeremy McConkey  
Network Manager  
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**EXEMPT/  
CONFIDENTIAL:** No

**PURPOSE/SUMMARY:**

To provide Cabinet Member Technical Services and Cabinet with an interim report on the recent extreme weather event and to identify initial opportunities for consideration

**REASON WHY DECISION REQUIRED:**

Cabinet Member Technical Services has requested a report on the response to the recent extreme weather event and a re-evaluation of the effectiveness of the existing Winter Service Policy in light of that event. Many of the options for changing or increasing service provision have cost implications that would require Member approval.

**RECOMMENDATION(S):**

That Cabinet Member Technical Services:

1. Notes the interim report; and
2. Confirms his recommendation(s) to Cabinet

That Cabinet:

1. Notes the interim report;
2. Considers the recommendations of the Cabinet Member; and
3. Determines what action should be taken to change or enhance the existing Winter Service Policy and Winter Maintenance service provision.

**KEY DECISION:** No

**FORWARD PLAN:** No

**IMPLEMENTATION DATE:** At the end of the 'call-in' period

**ALTERNATIVE OPTIONS:**

Maintain the existing Winter Service Policy and Winter Maintenance service provision in its current form and at its current level

**IMPLICATIONS:**

**Budget/Policy Framework:** A number of the recommendations have a budgetary implication as identified within the report

**Financial:**

The current Winter Maintenance budget within Highways Management is £0.440m (including Trunk Roads). This resource is generally sufficient to cover a typical foreseeable winter season. However, with the exceptionally severe weather conditions experienced during December, it is considered that this budget will be overspent this year.

The proposals contained within this report are offered as suggestions for consideration by Members, to enhance and improve the level of service for winter gritting given the experiences of this year so far. However, the additional costs of providing such enhancements would not only be dependent upon the priorities agreed with Members, but the need to find additional funding, since it is felt that such costs could not be contained within existing resources.

<b><u>CAPITAL EXPENDITURE</u></b>	<b>2010/ 2011 £</b>	<b>2011/ 2012 £</b>	<b>2012/ 2013 £</b>	<b>2013/ 2014 £</b>
Gross Increase in Capital Expenditure	TBC	TBC	TBC	TBC
Funded by:				
Sefton Capital Resources				
Specific Capital Resources				
<b><u>REVENUE IMPLICATIONS</u></b>				
Gross Increase in Revenue Expenditure	TBC	TBC	TBC	TBC

Funded by:				
Sefton funded Resources				
Funded from External Resources				
Does the External Funding have an expiry date? Y/N	When?			
How will the service be funded post expiry?				

**Legal:** The existing policy is considered sufficient to discharge the Council's legal requirement to ensure, as far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

**Risk Assessment:** The policy is being re-evaluated in light of the most severe weather in Sefton in perhaps 50 years.

**Asset Management:** The highway network is a major asset to the Council and its communities that needs to be maintained.

#### **CONSULTATION UNDERTAKEN/VIEWS**

FD618 – the Acting Head of Corporate Finance has been consulted and his comments have been incorporated into this report

#### **CORPORATE OBJECTIVE MONITORING:**

<b><u>Corporate Objective</u></b>		<b><u>Positive Impact</u></b>	<b><u>Neutral Impact</u></b>	<b><u>Negative Impact</u></b>
1	Creating a Learning Community		√	
2	Creating Safe Communities	√		
3	Jobs and Prosperity	√		
4	Improving Health and Well-Being	√		
5	Environmental Sustainability		√	
6	Creating Inclusive Communities		√	
7	Improving the Quality of Council Services and Strengthening local Democracy	√		
8	Children and Young People		√	

**LIST OF BACKGROUND PAPERS RELIED UPON IN THE PREPARATION OF THIS REPORT**

Winter Service Policy and Operational Plan, [www.sefton.gov.uk/default.aspx?page=2794](http://www.sefton.gov.uk/default.aspx?page=2794)

Report to Cabinet Member Technical Services, 28<sup>th</sup> January 2009, *Winter Service 2008/09 – Progress Report*

Report to all Area Committees, 1<sup>st</sup> - 16<sup>th</sup> July 2009, *Winter Service*

Report to Party Group Leaders and Area Committee Chairs Meeting, 13<sup>th</sup> August 2009, *Winter Service*

Report to Southport Area Committee, 28<sup>th</sup> July 2010, *Winter Service*

Report to Southport Area Committee, 6<sup>th</sup> October 2010, *Winter Service*

## BACKGROUND

1. The Cabinet Member will be aware that the Environmental & Technical Services Department provides a Winter Service to the borough in accordance with the Council's Winter Service Policy and Operational Plan. Officers monitor the weather conditions 24 hours a day throughout the winter season and enact the plan when weather conditions dictate. A local contractor who has secured the contract twice consecutively in open competitive tendering provides the actual gritting operation.
2. The Railways and Transport Safety Act 2003 (section 111) inserted an additional section (41(1)) to the Highways Act 1980 which placed a duty on Highway Authorities in respect of winter conditions, as follows:-

*"In particular, a Highway Authority is under a duty to ensure, as far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice"*

3. The Council operates to a Winter Service Policy and operational plan that has been approved by the Council and is reviewed each summer to ensure that it remains "fit for purpose". During the summer of 2009 extensive consultation was undertaken on the policy via all Area Committees and in July and October 2010 further reports were requested by and submitted to Southport Area Committee addressing the potential and costs of enhancing the current policy to include: gritting roads and footways on approaches to schools not already on the established gritting routes; and the provision of additional Grit Bins outside schools funded from Ward Budgets. In light of the technical limitations of normal gritting methods in areas with lower levels of traffic movement and the resources required these reports were noted but did not result in any change to Council Policy. The Southport Area Committee did request that the Council approach Schools to offer the provision of Grit Bins outside their premises at their cost, this was done but no school has requested such provision to date. The Committee further requested that due to the technical limitations of normal gritting methods in areas with lower levels of traffic movement that alternative ice prevention/clearance methods be investigated for such areas and a small-scale trial of an alternative method is currently being undertaken.
4. The Winter Service Policy is based on managing typical winter conditions in the borough and reasonably foreseeable/likely "worst-case" situations. Typical winter conditions in Sefton may see temperatures fall below zero during the night and on the coldest days, usually recovering to above freezing during the day, with occasional limited snowfall. Subject to regular revision this policy has generally served Sefton well for a number of years in dealing with the winter conditions experienced.
5. At present, there are 8 specific gritting routes identified for the borough's roads that treat 209 miles (35%) of Sefton's total highway network. These routes are gritted routinely when icy conditions are forecast or evident. Latest Audit

Commission guidelines suggest that primary gritting routes should treat between 12% and 25% of the carriageway network. At 35% of the total highway Sefton easily exceeds these guidelines. Three of the nine Gritting Vehicles are also fitted with Snow Ploughs and ploughing routinely occurs on the gritting routes whenever necessary, practical and safe to do so.

6. We also grit footways in main town centres across the borough (i.e., Southport, Formby, Maghull, Crosby and Bootle), provide Grit Bins at 58 locations such as slopes and sharp bends across the borough and where possible re-deploy staff available to assist with snow and ice removal at priority footway locations.
7. So far this winter the current Winter Service Policy has resulted in the gritting of Highway and Footway Gritting Routes on 24 occasions prior to 17<sup>th</sup> December 2010 and 45 occasions in total to date. It is further understood that necessary refilling of the 58 Grit Bins has been undertaken on 4 occasions so far this winter.

### **EXTREME WEATHER EVENT COMMENCING ON 17<sup>TH</sup> DECEMBER 2010**

8. The extreme weather event that commenced on 17<sup>th</sup> December 2010 resulted in the most severe weather experienced in Sefton for many years, certainly the most severe in the last 20 years with some personal/anecdotal accounts suggesting it might even have been 40-50 years since such conditions were experienced.
9. Whilst the original forecast for the Friday 17<sup>th</sup> December suggested a snowfall of between 2 and 5 centimetres (1-2 inches) the reality saw a fall of up to 30 centimetres (8-12 inches) in places with the central and northern parts of the borough most severely affected. In addition temperatures were recorded as low as minus 17 degrees Celsius over a number of nights, with Crosby officially designated as the coldest location in the country, and remained below freezing for 10 consecutive days and nights (approximately 240 consecutive hours) preventing any significant thaw and turning much of the snow to ice, compacted-ice where it had been subject to pressure from vehicular or pedestrian traffic.

### **RESPONSE DURING THE EXTREME WEATHER EVENT**

#### Winter Service Policy/Highways

10. In anticipation of ice and snow the Gritters were sent out on 17<sup>th</sup> December to initially grit the roads at double the normal rate of spread and those vehicles fitted with a plough also ploughed where possible/necessary. The Gritters were then deployed on all 8 gritting routes twice more on that night, but even their efforts were hampered by the amount of snow that actually fell and even some fallen trees in places.
11. The Gritters are fitted with C-Track GPS tracking which captures location data and provides a record of the routes taken. The data provided is extensive and an example showing the movements of Highway Gritting Vehicle P123 KWB on 17<sup>th</sup> December 2010 is attached as Annex A. Similar information is recorded for all

Gritters. The data provided confirms when the vehicle left the Depot at Damfield Lane, Maghull (approximately 17.55hrs), the route it followed and when it returned to the Depot (approximately 20.20hrs). This “snapshot” of the data also confirms the two further deployments at approximately 22.00-02.20hrs and 03.00-05.40hrs, together with the further deployment to undertake additional ploughing at approximately 07.45-10.18hrs. Maps confirming the routes taken on all 8 gritting routes are included at Annex B for illustrative purposes. The C-Track information currently does not indicate that salt is being dispersed or the plough deployed, however the salt usage is measured by means of a weighbridge with each Gritter weighed before and after each gritting run.

12. The Gritters with Snow Ploughs were deployed all day on 18th and 19<sup>th</sup> December. In addition, the routes were gritted on 18th, 19th, twice on 20th and every night during the period of extreme weather. In addition to the normal gritting runs, officers responded to requests from the Police and Merseytravel to undertake additional ‘spot’ gritting at key identified locations that were causing particular problems.
13. Sefton has 2 road sensors (one in Thornton and one in Maghull) which measure the conditions at those locations on an hourly basis and at all times during the ten day period the sensors showed evidence of salt present on the road. An example of the data provided is attached as Annex C, similar information is recorded throughout the winter.
14. Early indications suggested a thaw by the end of the week however this was repeatedly delayed as the extreme conditions persisted. The 10 consecutive days and nights of sub-zero temperatures prevented any significant thawing effect resulting in the snow on the ground quickly turning to compacted ice and remaining in place for a prolonged period despite the amount of gritting undertaken.
15. As a result of this changing weather information and evidence that the normal methods could not make the impact desired a decision was taken to trial more aggressive methods to physically remove packed ice in particularly problematic areas using JCB diggers, albeit with a recognised risk of lasting damage to the highway. The resources that could be identified in a short timescale were deployed to a number of locations including:
  - Rose Hill/Ash Street Southport
  - Coast Road
  - Cambridge Road Southport
  - Station Road Ainsdale
  - Liverpool Road Ainsdale
  - Northway A59 Maghull
  - Formby By pass A565
  - Gorsey Lane/Fleetwoods Lane Netherton

The operation of ice removal (which involved both highway maintenance and Leisure Services contractors) was supplemented by additional gritting at those locations and took place on 23rd and 24th December 2010.

16. Footway Gritting was undertaken throughout the period and staff from the Operational Services Department were re-deployed where possible to undertake snow and ice removal at priority footway locations. Despite this the effect of these activities was limited because of the severity of the weather conditions referred to above, the number of available staff and the difficulties of undertaking that work (i.e. the manual removal of compacted ice and snow in sub-zero conditions).
17. Under current arrangements staff, typically staff in other key front-line services such as street cleansing & refuse collection, are generally only re-deployed when they are unable to undertake their primary role because that service can't operate and then only after any necessary action to ensure that when that service can resume it is ready to resume (e.g. that the vehicles are free of snow, that there are no breakdown issues, that the vehicles will be able to leave the depot etc.). This approach is necessary to ensure a swift "catch-up" following the disruption to those services, delays to which, particularly in the case of refuse collection, would cause further problems, dissatisfaction and reputational damage.

#### Schools

18. The recent adverse weather occurred when the schools were closed. The Council has worked with schools to prepare for severe weather conditions and in November 2010 the Council issued a revised Schools Emergency Management Guidance document to all Sefton schools. This document provides advice on pre planning, risk assessment, holding supplies of grit, clearing snow and communication with staff, parents and the local authority. In addition as referred to in paragraph 3 above, the Council has offered to provide Grit Bins to schools at their cost.

#### Health and Social Care

19. An annual Winter Plan is in place with Sefton NHS. This covers hospital admissions and discharge policies, which are monitored by senior staff in the acute sector, Sefton NHS and Health & Social Care Department on a daily basis. During the adverse weather conditions Bed Management meetings were held daily across the acute hospitals with Health and Social Care to ensure timely discharges.
20. The Adult Social Care Customer Access Team reported that there were no extraneous circumstances reported.
21. Domiciliary Care Services were in operation but calls prioritised depending on levels of need. Vulnerable adults who were known to the department were contacted by telephone to ensure they were safe and warm if carers could not



access their properties. Service users were extremely co-operative during the adverse weather.

22. Day centres remained open if service users could access them, although Community Transport was cancelled.
23. Community Meals service suffered some disruption but frozen meals were delivered to service users if necessary.

#### Communication and Co-ordination

24. A corporate Severe Weather Group meeting of senior officers from across the Council was convened on the afternoon of Monday 20th December and that group continued to meet as necessary throughout the period. Following this meeting, a significant amount of information was posted on the Council website. This was also sent out as a press release to local and regional media, including radio. A system of daily email messages, with updated information, was also set up for all Elected Members as well as partners of the council including; the voluntary sector, faith sector, police, NHS, Fire Service, Ambulance Service, MPs, parish councils, the Chamber of Commerce and others.
25. Further senior management meetings were held at 10.00 am daily throughout the period to enable operational updates and decision making along with information updates that were circulated as widely as possible. Information was therefore updated on a daily basis by the Communications Department from that original starting point. A total of nine separate press releases were issued about the severe weather and the impact on council services. A significant amount of verbal briefings were also given to individual media throughout.
26. The varied conditions across the region, with parts of Sefton being more severely hit than other locations, resulted in a number of enquiries both direct to the Council but also through media channels which questioned the Council's response to the weather event. Much of the media attention came through a daily phone-in show on BBC Radio Merseyside with numerous callers taking part in the show for a number of days running. Information was provided to the station throughout the severe weather and a number of enquiries were dealt with directly. Officers carried out two interviews and also some elected members took part in the debate, however the questions raised over the council's actions persisted. Information was also provided to BBC North West Tonight, which resulted in a balanced report, and an offer was made of an interview with an officer.
27. From Monday, 20th December, accurate and timely information was posted on the council's website and shared with Elected Members, partners and the media. This information was also inclusive of cleansing, refuse collection and other Council services. It also featured general advice for people about the severe weather including "community awareness" advice for people to "look out for their neighbours" etc as well as contact details for anyone with concerns about

vulnerable people or questions about council services. Information about frozen pipes and other practical advice was also supplied.

28. Following their contacts with residents, several Elected Members also made requests for other details to be posted/released. These included specific contact details and general advice on certain issues. All of these requests were dealt with.

## **INITIAL FINDINGS AND OPTIONS FOR SERVICE ENHANCEMENT**

29. It is clear that despite the efforts of staff and our contractor, the unprecedented conditions experienced over the 10 days from 17<sup>th</sup> December 2010 resulted in an outcome that was below the expectations of the Elected Members, residents and highway users. The level of impact achieved through application of the existing Winter Services Policy and other additional resources deployed was such that many people continue to believe that the Council failed to grit/plough or had not done so until it was too late.
30. The issues that require consideration are: what, if any, alterations/enhancements are required to the “routine” Winter Service to improve Sefton’s preparedness for this and future winters; and what, if any, additional “escalation” policy/resources should be provided/engaged in the event of a recurrence of out-of-the-ordinary extreme weather events similar to that experienced from 17<sup>th</sup> December 2010. Either type of enhancement will require additional resources and must therefore be very carefully considered, particularly at this time of significantly reducing local government funding.
31. **Snow Ploughing** - as reported, the Council owns three snow plough blade attachments for its nine Gritters. Whilst not all highways on all routes can be safely ploughed it is thought that some lengths of highway on the majority of routes could be ploughed in certain circumstances. Areas on the existing routes where it is thought ploughing would remain problematic include Churchtown village, Brooke Vale, Seaforth, Woodlands Avenue, Crosby, and a number of the smaller roads in Hightown. The number of problematic locations could increase in light of any practical experience. The success and safety of snow ploughing depends on the level of snowfall. As ploughing takes place the snow is relocated rather than removed, where the snow is ploughed to is therefore a matter of importance as the solution to one problem may lead to the creation of another. It is anticipated that a small amount of snow can be ploughed successfully so as not to create an obstruction on footways or block access to private drives or cars. However, a substantial fall such as we had recently could result in many obstructions being created and it is therefore a matter of judgement as to whether ploughing in very extreme falls of snow would be acceptable. Nevertheless, there is an option available to purchase up to a further six snow ploughs so that each Gritter (including the spare stand-by Gritter) could be fitted with a ploughing blade whenever necessary.
32. **Grit Bins** – There have been a number of suggestions that further Grit Bins should be provided at more locations in the borough, including in and around

shopping areas. It is suggested that this would allow traders to assist in the process of ice prevention/clearance by using grit from the bins in the vicinity of their business. It has also been suggested that as grit bin capacity is limited further salt could be deposited “loose” at town centre locations for use by businesses when conditions are particularly bad. There is however a concern that this latter response in particular could easily lead to the theft of the salt for private use (as is already the case on many occasions with the current Grit Bins). An initial exercise by officers has identified as many as 110 further locations that might be considered under the criteria suggested. It is suggested that if the Cabinet Member and Cabinet were inclined to pursue this approach further consultation could be undertaken with Elected Members, businesses, emergency services and other Council Departments to refine a list of possible locations.

33. **Additional Gritting** - There are a number of locations that may benefit from additional gritting in times of an extreme weather event. Typically these are roundabouts, bridges, sharp bends and key junctions. Rather than develop a list of these locations, instructions could be given to our experienced contractor at the appropriate time to increase the spread rate as necessary. This would increase salt usage and that would need to be taken into account when agreeing the restocking profile with our supplier. In addition, in order to improve the effectiveness of the use of Grit at Grit Box locations, staff could be deployed to undertake grit-spreading duties at those locations. If these were Council staff that would cause disruption of the services those staff are normally engaged in, if they were external staff there would be a financial cost to this.
34. **Gritter GPS-Tracking** - Whilst the location of the Gritters is GPS-tracked the equipment does not currently record whether or not the grit distributor is operating or the snowplough deployed. Additional equipment could be readily added to the Gritters to capture this information and provide evidence of when and where grit is actually being deposited or the snowplough deployed (it would still not measure the amount of grit spread).
35. **Salt** - We currently have a restocking agreement with our salt supplier, so that as we use salt we are restocked to agreed levels on a regular basis throughout the winter. This allows us to purchase salt at the appropriate level rather than going to the expense of buying large amounts that we may not need. At the start of the winter the salt dome (used to store the salt we use at optimum condition) is restocked to its capacity of 950 tonnes and is restocked throughout the season as described above. It should be noted that at no time during this current winter, including during the 10-day extreme weather event, has the Council run short of grit. If Members determine to increase the number of Grit Bins or implement other means of grit distribution this restocking profile would need to be revisited and increased. In addition, a further stock of salt could be sourced and held under temporary cover as an emergency supply for use in extreme situations, however, this would need to be purchased at the end of the winter season when demand is much less than at other times during the winter and there is a significant risk of salt wastage due to deterioration in the event that such additional stocks are not required in the following winter.

36. **Additional Resources** - The availability of human resources to clear snow and ice is restricted, public expectation of the size of the Council's re-deployable workforce and the impact that they can have across the whole borough almost certainly exceeds the actual resource available/impact possible. An exercise is underway to identify and reassess the internal resources available and how they could/should be deployed, together with identifying other external resources that could be made available to assist further and the cost of deploying those resources.
37. **Winter Service Policy** – The current policy and operational plan has generally served the Authority well, each year officers undertake a risk-assessed review of the policy based on typical winter conditions in the borough, the severity of winters experienced and reasonably foreseeable/likely “worst-case” situations. Whilst it is still considered that the current policy would continue to be fit for purpose on the vast majority of occasions, in light of the severity of the latest extreme weather event there may now be a need to establish a further element of the policy to call upon in rare situations such as those which took place recently. It is therefore proposed to introduce a two-tier policy document consisting of Tier One that would be enacted in the majority of cases and a Tier Two “Escalation Policy” that would be enacted when conditions reach a sufficiently high level of severity that a Tier One response would be insufficient. This approach to the policy, along with protocols to determine how it would be enacted will be subject to a further report.
38. **Co-ordination and Escalation of the Council's Response** - The recent extreme weather event commenced on a Friday evening and whilst the highways related Winter Service operations continued throughout the weekend and the Council's existing emergency responses were in place (e.g. Emergency Duty Co-ordinator; Social care Emergency Duty Team etc.), there has been criticism that senior managers did not meet collectively until the Severe Weather Group was convened at 2.00pm on Monday 20<sup>th</sup> December. Consideration needs to be given to when and how Sefton's response should be escalated beyond the normal response in the event of an extreme event that is beyond normal operational conditions but not sufficient to activate the Major Emergency Plan, regardless of the time it occurs. This issue will be subject to a further report.
39. **Engagement with the Community** – Liaison between the Communications Team and the service departments was effective and resulted in a good level of internal and external communication activity. However, feedback has emphasised that consideration should be given to alternative/improved methods of communication for residents and businesses in future, recognising recent developments in immediate communication channels, such as social networking sites like Twitter and Facebook. A more pro-active approach to informing residents of issues, which could be faced in severe weather, will be adopted through the media and on the website in the run-up to winter in the future. Information on the Council website will also be duplicated on the staff intranet site to ensure as many people as possible are engaged. Further to this, there is a need to enhance our engagement with traders to ensure our response is as good as it can be and that they too are

appropriately prepared for severe weather conditions, in order keep businesses operational and accessible to the community. The Neighbourhoods Team within the Neighbourhoods and Investment Programmes Department has strong links with Elected Members and the business community, and further work will be undertaken to explore how these two-way communication channels can be used to ensure that people are aware of what they can expect from weather conditions and the Council's response. This issue will be subject to a further report.

40. **Voluntary, Community and Faith Organisations** – It has been suggested that current arrangements fail to maximise the use of people and resources that might be available within voluntary, community and faith organisations/networks. Officers will explore opportunities for improved links with these organisations/networks in Sefton. This issue will be subject to a further report.

## ISSUES FOR CONSIDERATION

41. The following are some potential short-term actions (i.e. for the current Winter Season) and longer-term actions (i.e. ahead of next winter) that Members are asked to consider and provide direction on. This is not an exhaustive list and further suggestions may emerge as consultation continues.

### Possible Immediate/Short-Term Actions

	Action	Timescale	Approximate Cost
(a)	Procurement of up to 6 additional Snow Plough Blades such that all highway Gritting Vehicles are equipped with a plough. This would improve the level of preparedness for snow events across the borough and give greater flexibility in the response to such events.	3-4 weeks	£35,000
(b)	Enhancement of C-Track GPS monitoring to include the recording of grit distribution and snow plough deployment. This would not improve the actual response given but would improve performance monitoring and reassurance in relation to the service delivered.	TBC	£1,500
(c)	Purchase additional Grit Bins (cost shown is based on 100 additional bins)	TBC	£23,000
(d)	Additional cost of filling 100 additional Grit Bins (cost shown is based on a single fill of all bins)	TBC	£3,100
(e)	Deployment of Gritting Contractor staff to undertake manual gritting at Grit Bin locations (Cost shown is based on current provision of 58 Grit Bins)	Immediate	£1,700 each time
(f)	Deployment of Gritting Contractor staff to undertake manual gritting at individual Grit Bin locations.	Immediate	£85 per location
(g)	Procurement of additional external resources to be deployed on snow/ice removal, as needed, during extreme weather events. (Actual rates can be commercially sensitive, the cost shown to the right is for illustrative purposes only and is based on typical daily rates for deploying a team consisting	Immediate	£1,850 per team day

	of: 1 Supervisor; 1 JCB and Driver and 10 Operatives for a single day).		
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Possible Longer-Term Actions

	Action	Timescale	Approximate Cost
(h)	Procure up to 500 tonnes of additional salt as emergency supply. This would have to be stored outside the existing Salt Dome and would be for use as an additional stockpile for use in the event of extremely severe conditions as indicated in paragraph 32 above	3-4 months	£20,000

42. The Cabinet Member is requested to note this report, consider the issues raised and in particular possible actions identified in paragraphs 29-41 and make appropriate recommendations to Cabinet for their consideration.
43. Cabinet are requested to note this report, consider the issues raised, in particular possible actions identified in paragraphs 29-41 and to consider any recommendations from Cabinet Member Technical services in determining what action should be taken to change or enhance the existing Winter Service Policy and Winter Maintenance service provision.
44. A further report will be submitted to the Cabinet Member and Cabinet in due course.

**The following documents are attached:**

Annex A – Example C -Track Movement Report

Annex B – Maps Showing GPS-Tracked Gritter Movements

Annex C – Example Data From Thornton Road Sensor