



**BRIGHTON & HOVE CITY COUNCIL
WINTER SERVICE PLAN 2009/10**

APPENDIX

1. Introduction

This document aims to set out in one plan sufficient detail to inform anyone involved in the management of the Winter Service of current Procedures and requirements. The plan is known as the "White Book".

2. Preamble

The information contained in the White Book is generally in accordance with the Local Authorities Association's Code of Good Practice for Highway Maintenance (1989) and its 1991 Winter Maintenance Supplement. The Best Value Code of Practice launched in July 2001 has also been considered, as has the 2005 update. The new Code makes 12 recommendations regarding the Winter Service and a commentary on each is made in Appendix X, showing how Brighton & Hove City Council's Winter Service Plan accords with these recommendations.

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3. Objective

The Railways & Transport Act 2003: Section 111 – Highways, Snow & Ice, has a duty, as far as is reasonably practicable, that the safe passage along a highway is not endangered by snow and ice.

The Traffic Management Act 2004 places a network management duty on the local authority to secure the expeditious movement of all users.

The objective is to provide a winter service, which will permit, as far as is reasonably possible, the safe movement of traffic on designated roads throughout Brighton and Hove and to keep to a minimum delays and accidents brought about by adverse weather conditions. Designated footways and cycleways are salted only in severe and prolonged snow conditions.

4. Definitions

4.1. Winter Service Period.

The winter period shall be from 1 November each year to mid March the following year. The period may be extended on a day-to-day basis by the Head of Network Management in

cases of severe cold weather continuing into April or starting in October.

4.2. Precautionary Salting

The application of salt to carriageways on priority routes usually in advance of frosty conditions (often referred to as spreading, gritting or pre-salting).

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4.2.1. Hilltops Routes

Two routes salted on marginal occasions where frost is liable to form on hilltops and in known frost hollows furthest from the influence of the sea. The routes usually take less approximately 1½ hours each to complete.

4.2.2. Standard Routes

The most frequently instructed routes but does not cover the warmest areas identified by thermal mapping. Six routes cover main road, bus routes, emergency service depots, main hospitals, important commuter routes, large schools and shopping centres. The routes usually take less approximately 2½ hours to complete.

4.2.3. Full Routes

An extension of each standard route to cover the warmest areas and is usually instructed when a wet road is liable to freeze or in advance of snow. The routes usually take up to 3½ hours to complete unless it is snowing.

4.2.4. The routes are defined as pace notes with plans and are kept in the Out of Hours office at Hollingdean Depot. These are summarised in Appendix B. Copies of the notes are also kept on the shared Highways Drive >Winter Service Plan 2009-10.

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4.2.5. Where there is leakage of ground water from the roadside, it will be treated on a reactive basis.

4.3. Ploughing

The removal of snow by means of a plough blade attached to a spreader or such other vehicle as may be agreed by the Client.

4.4. Client

The Client is Network Management, Environment Directorate,

Brighton and Hove City Council.

4.5. Winter Service Contractor – WSC

The in-house service provider for waste management (Cityclean) provides the drivers and other operatives for the Winter Service. For the sole purpose of clarity, they are referred to as the Winter Service Contractor (WSC) in this plan. Details of Rota at Appendix F. The co-ordination of drivers at the Depot will be carried out by the Emergency Out of Hours' Officers, reporting to the Head of Network Management. For the purposes of this document, the Out of Hours Officers will also be referred to as the WSC, receiving and carrying out instructions from the Winter Service Duty Officers or the Head of Network Management (the Client).

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4.6. Winter Service Duty Officer - WSDO

The Duty Officer is employed by the client and the duties are shown in paragraph 5.2. Although the duties are rotated, whoever holds the winter maintenance mobile phone is on duty and is known as OSCAR 5. Details of the rota and contact numbers are in Appendix E.

E

5. The Client's Role

5.1. The Client will be responsible for: -

- instructing the contractor
 - providing salt
 - providing the spreaders and ploughs and their maintenance requirements.
 - providing route information and updates where necessary.
- The Client will operate a round the clock service for the Winter Service period.

5.2. WSDO

a) The functions of the WSDO will be: -

- to receive and record daily weather forecast including updates
- to decide what action is required and when
- to instruct the WSC in reasonable time to enable the action to be fulfilled
- to inform the Emergency Out of Hours' officer of every decision
- downloading the Data Loggers and storage of

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information.

- responding to public queries and reports
- responding to and recording decision based on police information or requests. Records should be kept on the form detailed in Appendix S.
- ensure that decisions are also communicated to Cityclean relevant staff such as the Operations Managers (Refuse) and Contact Centre.

- b) The starting time will be determined by the Client and may need to be varied due to prevailing weather conditions. The starting time is the time the spreader leaves the depot. The finish time is the time the spreader returns to the depot.

6. The WSC (Winter Service Contractor)'s Role

6.1. Stand-by Rota

Throughout the Winter Service Period, the WSC shall organise and maintain a 24 hour stand-by rota for spreader drivers, fitters and other operatives who will be involved in the spreading operations and they shall be contactable by telephone.

The rota shall show the names and telephone number of personnel and shall be given to the WSDO before the season starts. See Appendix F.

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6.2. Response Time.

On receipt of an instruction from the Client the WSC personnel required to carry out spreading shall report to the depot in sufficient time to load the spreaders to enable them to leave at the time specified by the Client.

6.3. Spreaders and Loading Equipment.

- a) The WSC will be provided with seven spreaders - 6 for routes and one spare. 5 ploughs are provided for use in the event of major snow fall. See Appendix C.
- b) The WSC will provide the vehicle washing facilities. The loading equipment will be organised by the Client, but used and maintained by the WSC.
- c) The spreaders shall be driven at the speed recommended by the manufacturer to achieve the rate of spread of salt

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specified by the Client.

- d) Dataloggers – WSC to ensure that drivers always use the datalogger in accordance with the instructions manual in Appendix V. Technical breakdowns must be reported to the Client officer immediately. V

6.4. Handwork in the Event of Snow

Cityclean Operations Managers will be asked if they can provide sufficient labour and plant for handspreading of salt/grit in the event of severe snowfall and as directed by the WSDO. Contractors may also be used at the agreed rates during a snow event. L

6.5. Personnel

- a) Drivers.
 - i) The WSC shall provide sufficient personnel to enable all the vehicles listed in Appendix C to be capable of simultaneous operation. All personnel will be adequately trained for winter duties. Training shall be to City & Guilds 6159 and will cover operation of the prime movers spreaders and ploughs. If necessary, for 24 hours continuous operation the WSC shall provide additional personnel required by the Client. C
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Before the winter period, any spreader driver who is not familiar with the routes will be required to report to the Depot Co-ordinators for familiarisation with at least one standard route.

- ii) Also before the winter period the client shall employ sufficient WSC staff to test the spreaders and ploughs. The WSC shall report back all defects and problems so the Client can effect repairs before the Winter Service Period begins. This is called Operation Snowdrop. O
- iii) The WSC is responsible for the health, safety and welfare of the labour force.

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6.6. Spreader Driver's Mate

The WSC shall be asked to provide personnel to accompany spreader drivers during snow-ploughing operations. This may require doubling up from the drivers' rota or use of Cityclean's other operatives if agreed with the Head of Operations at Cityclean.

6.7. Driving Hours

The provision of drivers' hours is a matter for the Winter Service Contractor and it is also the Contractor's responsibility to ensure that the drivers comply with the appropriate laws governing driver hours etc. Where this has an impact on Cityclean operations, the Winter Service budget will pay any costs associated with relief agency cover.

6.8. Records

The WSC completes the Winter Service Action report for each instruction received and ensures that any necessary remarks are made by the drivers and that the driver signs and dates the report upon return to the depot. The WSC returns the Action Reports daily to the Head of Network Management. See Appendix H.

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6.9. Breakdowns

In the event of a breakdown the WSC will contact the Spreader Maintenance fitter directly. See Appendix G.

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6.10. The WSC is responsible for refuelling the spreaders. Refuelling will mainly be carried out at Hollingdean Depot but should fuelling need to take place at a garage, the WSC is responsible for passing the receipts to the Head of Network Management. Fuel cards are kept on each spreader keyring.

7. Operations

7.1. Pre-Salting.

7.1.1. All routes to be pre-salted shall accord with the Client's current objective.

7.1.2. Salting Procedures shall take the following into account: -

- i) Weather forecast
- ii) Timing
- iii) Rates of spread
- iv) Previous action

7.1.3. In general the spread rates will be 10gm/m² for pre-salting and up to 40gm/m² in advance of snow.

7.1.4. The council's waste management section, Cityclean, or other council sections may contact the WSDO for help with pre-salting or snow clearance on refuse routes that are not on the usual gritting routes. The WSDO will make the final decision on whether this work can be carried out, based on citywide needs, driver availability, future

forecasts and other priority factors that may need resources to be directed elsewhere.

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7.2. Snow Clearance - Carriageways

- 7.2.1. At the onset of snow, the Head of Network Management or the WSDO can instruct the area teams (Highway Inspectors, Streetworks and/or Highway Enforcement) to gather information about the overall situation in their areas. This information is to be fed back to WSDO by 1000 hrs on the first morning and a current situation report at the same time each day thereafter or more frequently if instructed by the WSDO.
- 7.2.2. Priority and effort is to be devoted to clearing the full routes. Once the routes are open and can be kept open attention may be turned to other public highways and is based on feedback from the area teams. The WSDO shall decide on that priority.
- 7.2.3. When heavy snow is forecast and at the direction of the WSDO, the ploughs will be fitted to 5 spreaders in readiness for use.
- 7.2.4. If precautionary salting has been carried out, ploughing will usually commence when the depth of snow exceeds 30 mm. A mix of salt and grit may be used in any salting operation during ploughing.
- 7.2.5. If precautionary salting has not been carried out, snow will be salted until the depth of snow exceeds 30 mm when ploughing will usually commence.
- 7.2.6. Section 67 of the road traffic regulation act 1984 gives police the power to close the road and put signs out in extraordinary circumstances. In the event of a road becoming blocked with snow or dangerous due to ice, the WSDO in association with Sussex Police may close that road temporarily to facilitate clearance.

For prolonged closure the Police may ask the Highway Authority to formally close that road with an Emergency Notice and then the Highway Authority will arrange appropriate signing.

7.3. Snow Clearance - Footways.

7.3.1. Snow clearance of footways will only be carried out during severe and prolonged snow events and at the decision of the WSDO/Head of Network Management. Town centre and main pedestrian routes are to be cleared first.

Private shopping precincts and private forecourts are not to be treated. Attention is then given to important linking footway and local shopping areas. In the last phase residential footways may be tackled but only with the prior consent of Director of Environment. Footway clearance is a lengthy labour-intensive task and therefore the WSDO must decide on priorities and when the snow may be likely to clear naturally due to improved weather conditions. See Appendix M.

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7.4. Snow Clearance - Night-time working.

Night-time working is only permitted in highest priority areas e.g., main roads and town centre footways where deemed necessary by the WSDO.

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7.5. Snow Clearance - Provision of Labour and Payment Thereof.

7.5.1. Before winter the Client is to approach its contractors and local plant hire companies to it to see if they would be willing to help in snow clearance. This is to identify the number of men available, plant, unit rates, communication arrangements, hire procedures and ability/previous experience in working on the highway. An annual register of snow clearance organisations is to be compiled by Client. If required for snow clearance, organisations on the register are to be approached before contact is made with any other organisations. See Appendix L.

L

7.5.2. Only the WSDO can instruct snow clearance contractors. Uninstructed work will not be paid for.

8. Weather Forecasting

8.1. The forecast outstation are situated on:

- the A270 Old Shoreham Road at the junction with Hangleton Link Road
- Bexhill Road, Woodingdean
- The Fiveways junction

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The forecast outstations are equipped with sensors to monitor air and road surface temperatures, precipitation, humidity,

road surface conditions and residual salt on the road surface, wind speed and direction. Data from the Forecast Outstation is retrieved remotely by computer.

8.2. Thermal mapping was used to identify sections of road which are cooler or warmer than average due to topography, type of construction, traffic flows and other factors affecting road surface temperature. This information was utilised for the initial route planning.

8.3. A Weather Forecasting Centre provides daily forecasts via an Ice Prediction System during the months November - March inclusive. Forecasts will be available by 1400hrs each day. During October and April a general forecast is provided but the service can be extended by authorisation of the Head of Network Management to provide more detailed forecasts if required.

J

8.4. An outline of the current Ice Prediction System is given in Appendix J. Detailed information on access and use is contained in its User Manual.

8.5. The forecast will consist of the following elements;

- i) A 'General Forecast' for Brighton and Hove for the following 24 hours;
- ii) 'Site Specific' temperature forecast for the outstations together with a written text forecast.
- iii) Morning Updates issued at around 8am each day, giving a resume of the previous night's weather, and an indication of likely conditions for the coming night;
- iv) 2-5 day forecasts are also provided to show the expected trend in the weather.

8.6 The WSDO will print out a copy of the weather forecast at the time of making their decision and ensure that this copy is safely filed.

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8.7 Updates will be made as necessary by the Weather Forecasting Centre and the WSDO will be telephoned by the Centre if they deem it necessary. Should the WSDO need to change the decision, they will inform the WSC immediately.

8.8 Outside of the Winter Service season, severe weather warnings are received by the Emergency Planning Office and will be acted upon accordingly.

8.9 Details of condition indicator system for 'Road Danger Warnings' plus other weather information are given in Appendix I. I

8.10 If for any reason the weather forecast is unavailable, precautionary salting is to be carried out when falling air or road temperatures reach +2°, provided the prevailing humidity, residual salinity and cloud cover warrant that decision.

9. Communications

9.1. The communications available between the WSDO & WSC are e-mail, telephone and fax. Communication between the WSC and its spreader drivers are the WSC's responsibility and shall be maintained at all times. Mobile phones are provided to all drivers. K

9.1.1. Telephones - Appendix K contains the mobile and home telephone numbers of persons who could be involved in the winter service.

9.1.2. Fax - also shown in Appendix K are fax numbers which may be useful during emergency situations. It is however possible that the fax machine may not be manned out of normal working hours and an immediate response may not necessarily be made.

9.1.3. During periods of adverse wintry weather, the WSDO may send an Environment colleague to the Police Control Room in John Street, Brighton to ensure the latest information on road conditions is co-ordinated between the two Authorities. The WSDO remains in control.

10 Co-ordination with Neighbouring Highway Authorities

10.1. Reciprocal salting arrangements ceased in 06-07 due to nationwide concerns regarding liability issues. BHCC will take responsibility for the notice of closure at Old Boat Corner if directed by ESCC WSDO.

10.2. In the event of snow then snow clearance will not follow the precautionary salting agreements but will be managed by each HA within its own boundaries, unless the duty officers of each authority agree on a day to day basis to assist each other. S

10.3. In the event of severe and prolonged snow or other business continuity issues, the Head of Network Management will liaise

with counterparts in East and West Sussex as required and with BHCC's Emergency Planning and Business Continuity Officers.

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11 Salt

11.1. Salt (Sodium Chloride) will melt ice and snow at temperatures as low as minus 21°C. However, salt starts to become less effective at minus 5°C and almost ineffective at lower temperatures. As a result, its use becomes practically, economically and environmentally difficult.

11.2. Available alternative de-icers are regularly reviewed, particularly with a view to their use on structures and special paved areas. However, such alternatives are currently prohibitively expensive and may also have their own environmental disadvantages. Therefore, as the temperature seldom falls below minus 5°C, salt is used almost exclusively as the means of melting ice or snow on the highways (including structures and special paved areas). For trouble spots or extreme gradients, grit may be spread to assist with traction. **C**

11.3. The salt currently in use is Crystalline Rock Salt complying with BS3247: 1991 Table 1. It is 6mm nominal size (Fine Grade). See Appendix C for current maximum stock allowed and method of procurement.

11.4. In extremely low temperatures, or heavy snowfall, a mix of salt and grit may be used to aid traction.

12 Salt/Grit Containers

12.1. A mixture of salt/grit is stored in bins at various roadside sites throughout Brighton and Hove as a self help for residents.

12.2. The general principles for providing a bin are as follows: -

12.2.1. Bins would not normally be situated on spreader routes unless there was considered to be a special need.

12.2.2. Hills, steep junctions and places where water can seep across the carriageway, are general siting considerations.

12.3. Location of salt/grit containers are shown in Appendix N. Currently there are over 300 bins throughout the City. **N**

12.4. Certain organisations such as police, fire, schools, may collect

small quantities of salt from Hollingdean Depot for use around their premises. Authorisation for this must come from the WSDO, and visitors must adhere to risk assessment procedures for collecting salt, shown in Appendix R.

R

13 Budget

13.1. The budget allows for precautionary salting of the Standard Routes 30 times per winter plus a two day snow event.

13.2. All costs incurred in Winter Service should be charged to the winter service budget which is administered centrally by the Client.

P

13.3. Appendix P indicates how any costs should be allocated.

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13.4. Any underspend of the Winter Service budget is added to the Corporate Contingency Fund and is carried forward to cover additional costs as a result of severe cold weather events and for any extraordinary requirements for the service such as technical/vehicular support. A major snow period lasting up to 5 days would utilise much of this contingency fund in covering the additional ongoing costs of operatives, fuel, vehicle maintenance and contractor work required to run such a major operation. During a serious snow event or an extraordinarily cold winter it has been necessary to draw down from this fund, and amounts have been drawn down in 2006-07 and 2008-09 for precisely this reason. If the fund falls below £250,000 it may be topped up by the environment budget at the year end should funds be available.

14 Health and Safety

14.1. It is particularly important that Health and Safety precautions are strictly observed by the Contractor during pre-salting and snow clearing operations. At these times road conditions are likely to be very poor with additionally poor visibility and weather.

14.2. If a spreader is overdue to return to the depot or contact is lost, the WSC shall be responsible for re-establishing contacts or instigating a search.

U

14.3. All gritters have a registered "Trakbak" locator system installed – contact details are listed in Appendix U.

15 Performance Monitoring

15.1. The Contractor is required to provide data relating to the execution of salting and salt used during winter maintenance to the WSDO to permit the monitoring of winter service operations.

15.2. The Association of County Councils' (ACC) document "Highway Maintenance – A Code of Good Practice – Winter Maintenance Supplement (1991)" and "Well Maintained Highways – A Code of Good Practice 2005" sets Standards and Performance Indicators for Winter Service activities. These are given in Appendix T. Suggested targets for these indicators have been set out by the Audit Commission and also appear in Appendix T.

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16 Business Continuity/Emergency Events

16.1 The usual rota for gritter drivers are 6 on shift per week. There are 15 members of staff trained to operate gritters. In reduced staffing conditions drivers may be asked to be on shift for 2 weeks at a time.

16.2 Drivers' hours legislation must be observed unless there is a compelling emergency reason to override these. If necessary, the service will be reduced to emergency main routes only already identified and documented in partnership with the emergency services. In this case, press communication must be given out to the public to notify of potential reduced safety compared to normal gritting routes.

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16.3 In a major snow event, a Winter Duty Officer will go as soon as practicable to the Depot and assist the Co-ordinators in overseeing the service operation. This will ensure that decisions can be made on the ground in real-time.

16.4 If it is not possible to treat the usual routes, either due to heavy snowfall, staff shortages or other major event, a priority network has been agreed with the emergency services and bus company. The priority emergency route list can be found at Appendix B (Spreader Route Information)

16.5 Communication to the public and other agencies will be co-ordinated via the Communications team and Emergency Planning/Business Continuity office.

17 White Book Updates

White Book Updates will be made as required and each update will be incorporated into the annual winter service plan. Any updates made during the winter season will be recorded on an update form (a copy of which is included in Appendix Y.)

Y

Salting routes will be reviewed before each winter period to take account of network and bus route changes.

18 Distribution List

- A list showing holders of the White Book is shown in Appendix Z. **Z**

19 Appendices

- A list of Appendices is shown at the commencement of the Appendix Section.