

Development and Environment

Highway Maintenance

Winter maintenance operation plan 2014/15

Commencement date November 2014

The Highway Maintenance section is responsible for providing the winter maintenance service for London Borough of Croydon including: -

- Setting Standards
- Setting treatment priorities
- Day to day operations
- Monitoring performance
- Liaising with adjoining Council's, Emergency services and other highway users.

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WINTER SERVICE POLICY

INTRODUCTION

In July 2001 the Code of Practice for Maintenance Management was published. It is founded on a key principle of delivering best value in highway maintenance and includes guidance for the Winter Service. This winter's Service Policy Statement is based on the Code's recommendations.

Under Section 41 of the Highways Act 1980 highway authorities are under a statutory duty to maintain the highway. However, prior to 2003 this duty did not include a duty to prevent or treat ice or snow on the highway. In October 2003 a new clause, Section 41.1A, was inserted into the Highways Act introducing a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice. The format and general content of this Winter Service Operational Plan 2014/15 remains similar to 2013/14 takes into account the recommendations of the Well Maintained Highways, (18th Sept 2013 update) - Appendix H – Winter Service. It is in the context of what is reasonably practicable that this winter service policy attempts to ensure the safe movement of all highway users as well as enabling everyday life to continue.

The Council's Winter Service Policy sets out its arrangements for taking preventative measures in anticipation of ice and snow and for the removal of ice and snow.

WINTER SERVICE POLICY STATEMENT

1.1 Objectives

The Council's policy is to provide a Winter Service that, so far as reasonably practicable, will allow for pre-defined routes of carriageways to be treated in accordance with their priority on the highway network and prevailing weather conditions. This is to prevent the formation of ice and snow (pre-treatment) and also to facilitate the removal of ice and snow from pre defined routes/areas of carriageways, footways and cycle ways (post-treatment). By determining this policy it is the intention to minimise the risk to safety that highways users confront in winter conditions and minimise the non-availability of the highway network through ice and snow. However, this policy recognises that given the scale of financial and other resources involved in delivering the Winter Service, it is not practically possible to provide the service on all parts of the highway network, neither is it possible to satisfy the requirements of all those wishing to use the highway.

1.2 Route Priority

The Winter Service involves treating the highway in order to:

- (a) Pre-treat designated routes in response to Met office forecast , "pre-salting"
- (b) Melt ice and snow already formed, "post salting"
- (c) Remove snow.

Priority routes have been defined from a hierarchy of carriageways and footways and take account of both strategic and local needs as follows:

- **Carriageways**

- Primary Distributor Roads
- Secondary Distributor Roads
- Main bus routes
- Main approach routes to transport interchanges
- Roads leading to hospitals, ambulance, fire stations
- Other hazardous locations such as steep gradients

- **Footways**

- Major town centres
- Local shopping areas
- Main approach routes to transport interchanges
- Footways close to Hospitals, medical centres, schools other heavily used footways

- **Cycle ways**

Those which form part of the carriageway network that is included in the priority route for salting. Those which share footways that form part of priority plans for treatment.

1.3 Treatment

Precautionary and post salting

When potentially hazardous road conditions have been forecast, all pre-defined precautionary salting routes on the carriageway network will be treated as necessary within specified times to attempt to prevent ice from forming or to melt ice already formed.

Snow/Ice

In the event of a snowfall/ice additional resources will be mobilised for clearance once the severity of lying snow/ice and the likely effect on the weather conditions forecast for the next 2-5 days has been established.

Snow Clearance (Carriageways)

Snow clearance from carriageways will be carried out as soon as possible in the following priorities

- All roads covered by primary salting routes.
- All roads covered by secondary salting routes.
- Other routes

Snow Clearance (Footways)

Snow clearance from footways will commence as soon as additional resources can be mobilised. These resources will be allocated to the priority list of locations on footways shown below in 1.6.

Icy Footways

When hazardous conditions occur due to freezing other rainfall or a light dusting of snow then post treatment depending on availability of resources will be carried out on footways in priority order as stated in clause 1.2 above.

Snow Clearance (Cycle ways)

Dependant on the extent of use, it is the intention that snow clearance from cycle ways that form part of the carriageway will be accomplished where reasonably practicable after securing free flow of vehicle traffic. Cycle ways that share footways will be cleared in accordance with the priority allocated to footways.

1.4 Salt Bins

Salt bins, as a self help facility, will be provided at locations where difficulties are likely to be experienced. Salt bins are replenished prior to commencement of the gritting season and replenished as necessary throughout the season when resources become available. This will enable local residents or passing motorists to treat the carriageway and footway within the locality, should difficulties be experienced.

1.5 Weather Information

An efficient and effective Winter Service is only possible with information about weather conditions that is reliable, accurate and provided in a timely manner. The Council will continue to utilise cost effective technology to ensure that decisions can be made with the advantage of having the best weather information available. During this season trials are being carried out on the next generation approach to weather forecasting, its a new forecasting system called "Route based forecasting" this is a web based system which provides actual forecasts on our designation routes using thermal mapping to measure road surface temperatures rather than an area based forecast we currently receive. These trials will run in conjunction with the conventional forecasting method and monitored throughout the winter season.

1.6 Additional Resources

Additional resources required for severe conditions will be obtained, for the most part, from contractors who have obligations to provide such resources under other contracts with the Council e.g. highway maintenance, Environmental and Leisure Services, etc.

1.7 Budgets

A budget for Winter Service will be provided in addition to other highway maintenance needs. The amount provided will cover all fixed costs and variable costs for an average winter. Budget provision will be reviewed if there is substantial modal shift, particularly to walking and cycling. It may be necessary for the cost of dealing with exceptionally adverse conditions to be met by additional funding.

1.8 Co-ordination with other local authorities and Transport for London

The Winter Service Operational Plan will aim to ensure similar standards are adopted for cross boundary roads and with TfL, which will undertake the winter service on the Transport for London Road Network.

1.9 Winter Service Operational Plan

A Winter Service Operational Plan sets out how these policy objectives are to be achieved will be reviewed annually after consultation with various stakeholders to ensure that consideration can be given to changing circumstances which might affect the performance of the Winter Service.

1.10 Performance Monitoring

A report following the above review will be submitted to the Executive Director evaluating the performance of the Winter Service Policy and Operational Plan.

SUMMARY OF CALL OUT PROCEDURES

Planned call-outs by the Engineer are based on forecasts issued by the London Weather Centre. Emergency call-outs may be made in response to complaints. Response is broken into three general categories, all of which will be actioned only upon instruction from the Duty Officer.

- **Precautionary Gritting**

With a forecast of frost or icy patches a 4 vehicle precautionary grit is called by the Duty Officer as required.

- **Full Shift**

With a forecast of widespread ice or snow a full shift will be required to work continuously as directed by the Duty Officer.

- **Emergency call-out**

Response time for spot gritting will be 1 hour from receipt of the information supplied By the Duty Officer

There are 4 routes for precautionary gritting, 6 routes for our optimised primary and secondary gritting and 9 routes for primary and secondary gritting.

The driver and mate of a gritter must follow the prescribed routes as laid down and shown on the relevant maps and written directions. They will also record the location and time at 15 minute intervals throughout the route and all records to be sent to and filed by the client.

Call-out action by weather indicator

The following is guidance for specific action required on receipt of various weather indicators from the London Weather Centre.

- (A) The Duty Officer monitors the weather forecast seven days a week. The call-out system operates 24 hours a day and is called as required. Pre-gritting the previous evening may be requested.
- (B) The Duty Officer may request spot treatment at specific locations or entire gritting routes 24 hours a day, seven days a week.

Action by the Duty Officer

MetO Colour States

The definitions of the Colour States appear on the bottom of the example forecast, but I list here a rough guide to how these align with your previous indicator watch words.

On a **GREEN** night you will not have anything to worry about, and this corresponds with NIL in the old scheme, RST's will be well above freezing and no ice, frost or snow is expected.

On an **AMBER** night, action may be required and you will need to read the forecast to see what the potential problem is. AMBER tends to be issued on marginal nights, either where RST's are expected to fall below freezing, but where roads are expected to stay dry, so Hoar Frost or ice is not expected to form (ALPHA conditions). AMBER forecasts normally occur when confidence is low (uncertainty over where the cloud may break or how quickly is a good example). In these situations a discussion with the forecaster may help you make your decision.

On a **RED** night, action will be required. On these nights widespread hoar frost, ice or snow will be expected, BRAVO, CHARLIE, DELTA and SNOW would all fall within the criteria for RED, with the hazard summary table in the top part of the forecast giving you details of what hazards are expected.

KEY

NH = No hazard expected – high confidence.	YH = Yes hazard is expected – high confidence.
NL = No hazard expected – low confidence.	YL = Yes hazard is expected – low confidence.

Readiness Colour Coding		
GREEN	Road surface temperatures are expected to remain above freezing with no ice and /or snow accumulations possible.	NIL
AMBER	Road surface temperatures are expected to fall close to or below freezing with ice and/or snow accumulations possible.	ALPHA BRAVO
RED	Road surface temperatures are expected to fall below freezing with ice and/or snow accumulations.	BRAVO, CHARLIE DELTA SNOW

Full-Shift Procedures

Carriageways

Primary Routes are to be concentrated on by the gritters, until the routes have received an appropriate number of grit applications to clear them of snow/ice. In addition the Duty Officer may request that certain additional locations or routes be gritted.

When ice or snow is expected all demountable bodies will be installed along with the snow ploughs prior to the commencement of the shift. Gritting takes place so that all primary routes are treated, treatment is repeated as necessary until the condition of primary routes is satisfactory, and then if conditions persist the Duty Officer may redirect resources to secondary routes. All other roads are gritted according to need and the availability of resources.

Footways

Co-ordination of this service is undertaken by the Environmental and Leisure Services but specific works may be authorized to ensure public safety where local icy conditions have formed. The Duty Officer will notify the Environmental and Leisure Services of all gritting operations throughout the season, when hazardous conditions occur due to freezing rainfall or a light dusting of snow then post treatment depending on availability of resources will be carried out on footways in priority order as stated in clause 1.2 of the winter service policy statement. The remainder of the footway network will be undertaken as resources dictate. Where local icy conditions have created a particular danger the use of selected highway maintenance contractors can be utilized as additional support.

Salt Bins

There are approx 570 grit bins in the Borough for use by the public on the footways and carriageways. In the early autumn all bins are checked, repaired and refilled with grit. After snow fall when resources allow all bins are refilled. The number of bins and their locations are reviewed every year.

The Council will hold stocks of grit / salt at the beginning of the winter period of approximately 4,700 tonnes. Spread rates have been set as follows:-

(A) **Precautionary Gritting**

Pre-salting - approximately 10gm/sqm

(B) **Snow Conditions**

Light snow - 20-30 gm/sqm

(C) Hard packed snow/ice - 40 gm/sqm

❖ **Note:** **Where snow has been forecast all vehicles are to be fitted with Ploughs prior to shift commencement.**